

10TH JUNE 2016

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08:45 - 10:15 **PARALLEL PAPERS SESSION 1**

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08:45 - 10:15 **CLIMATE POLICY: INTEGRATED ASSESSMENT MODELS** Room Peaks 6,7,8  
Chairperson: Ivan Rudik, Iowa State University

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**THE WISDOM OF THE ECONOMIC CROWD: CALIBRATING  
INTEGRATED ASSESSMENT MODELS USING CONSENSUS**

Peter Howard, New York University  
Co-Author(s): Sylvan Derek, New York University

**SOCIAL DISCOUNTING IN GENERAL EQUILIBRIUM**

Lint Barrage, Brown University

**AN ASSESSMENT OF THE IMPACT OF CLIMATE CHANGE ON THE  
INSURANCE MARKET: GLOBAL AND LOCAL ANALYSES**

Mordechai Shechter, University of Haifa  
Co-Author(s): Ofira Ayalon, University of Haifa, Ayelet Davidovitch,  
University of Haifa and Ruslana Palatnik, University of Haifa

**NON-CONJUGATE LEARNING IN DYNAMIC STOCHASTIC MODELS:  
LEARNING THE CLIMATE SENSITIVITY**

Ivan Rudik, Iowa State University  
Co-Author(s): Derek Lemoine, University of Arizona and Max Rosenthal,  
University of Arizona

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08:45 - 10:15 **WATER I** Room Peak 9  
Chairperson: Jacob LaRiviere, Microsoft Economics

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**THE WELFARE CONSEQUENCES OF THE 2015 CALIFORNIA  
DROUGHT MANDATE: EVIDENCE FROM NEW RESULTS ON  
MONTHLY WATER DEMAND**

Mehdi Nemati, University of Kentucky  
Co-Author(s): Steven Buck, University of Kentucky, Stephen Hamilton,  
California Polytechnic State University and David Sunding, University of  
California, Berkeley

**DOWN, DOWN, UNDERGROUND: A COMPARISON OF CORRELATED  
AND UNCORRELATED RANDOM PARAMETERS LOGIT MODELS IN  
ESTIMATING PREFERENCES FOR WATER UTILITY  
INFRASTRUCTURE INVESTMENT**

Jennifer Thacher, University of New Mexico  
Co-Author(s): Heidi Pitts, New Mexico Public Regulation Commission

**PUTTING PRICES INTO CONTEXT: HOW DO WEATHER AND POLICY-  
RELATED EVENTS IMPACT EFFECTIVENESS OF INCREASES IN THE  
MARGINAL PRICE OF WATER**

Janine Stone, California State University, Chico

Co-Author(s): Marco Costanigro, Colorado State University and Christopher Goemans, Colorado State University

**THESE ARE THE BREAKS: CAUSAL IMPACTS OF WATER INFRASTRUCTURE RELIABILITY ON TRAFFIC CONGESTION**

Jacob LaRiviere, Microsoft Economics

Co-Author(s): Casey Wichman, Resources for the Future

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08:45 - 10:15

**CLIMATE CHANGE: WEATHER I**

Room Peak 11

Chairperson: Maximilian Auffhammer, University of California, Berkeley

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**WEATHER AND WATER CONSUMPTION: EVIDENCE FROM CALIFORNIA TO GUIDE RESIDENTIAL WATER AND ENERGY CONSERVATION**

Steven Buck, University of Kentucky

Co-Author(s): Maximilian Auffhammer, University of California, Berkeley

**WEATHER INDEX INSURANCE: A STRATEGY TO ENABLE PRODUCTIVE RESOURCE INVESTMENTS BY SMALLHOLDER FARMERS FACING CLIMATE RISK?**

Geoffrey McCarney, University of Ottawa

Co-Author(s): Daniel Osgood, International Research Institute for Climate and Society (IRI)

**WELFARE EFFECTS OF CLIMATE CHANGE IMPACTS ON THE AGRICULTURAL SECTOR: EXPLORING MULTIPLE MARGINS OF ADAPTATION TO YIELD SHOCKS**

Frances Moore, University of California, Berkeley

Co-Author(s): Uris Baldos, Purdue University, Delavane Diaz, Electric Power Research Institute and Thomas Hertel, Purdue University

**CLIMATE CHANGE HAS SEVERE IMPACT ON FREQUENCY AND INTENSITY OF PEAK ELECTRICITY DEMAND ACROSS THE US**

Maximilian Auffhammer, University of California, Berkeley

Co-Author(s): Patrick Baylis, University of California, Berkeley and Catherine Hausman, University of Michigan

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08:45 - 10:15

**EXPERIMENTS I**

Room Peak 10

Chairperson: Sarah Jacobson, Williams College

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**RISK INTERDEPENDENCY, SOCIAL NORMS, AND WILDFIRE MITIGATION BEHAVIORS**

Katherine Dickinson, University of Colorado Boulder

Co-Author(s): Hannah Brenkert-Smith, University of Colorado Boulder, Nicholas Flores, University of Colorado Boulder and Gregory Madonia, University of Colorado Boulder

**FORMULATING AND TESTING A NEW CONSERVATION AUCTION MECHANISM IN AN EXPERIMENTAL SETTING**

Steven Otto, Cornell University

Co-Author(s): David Just, Cornell University, Gregory Poe, Cornell University and William Schulze, Cornell University

**POLICY INSTRUMENT CHOICE WHEN MARGINAL DAMAGES ARE UNCERTAIN: THEORY AND EVIDENCE FROM A LABORATORY EXPERIMENT**

David Heres, Centro de Investigacion y Docencia Economicas  
Co-Author(s): C.-Y. Cynthia Lin Lawell, University of California, Davis

**(IM)PATIENCE BY PROXY: MAKING INTERTEMPORAL DECISIONS FOR OTHERS**

Sarah Jacobson, Williams College  
Co-Author(s): Angela de Oliveira, University of Massachusetts Amherst

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08:45 - 10:15

**SHALE, OIL, AND GAS I**

Room Coppertop III

Chairperson: Hendrik Wolff, Simon Fraser University

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**THE EFFECTS OF THE NATURAL GAS AND OIL BOOM ON WATER USE IN THE U.S.**

Minhong Xu, University of Illinois, Urbana-Champaign  
Co-Author(s): Madhu Khanna, University of Illinois, Urbana-Champaign and Yilan Xu, University of Illinois, Urbana-Champaign

**LAND USE CHANGE AND UNCONVENTIONAL OIL AND GAS DEVELOPMENT**

Yusuke Kuwayama, Resources for the Future  
Co-Author(s): Timothy Fitzgerald, Texas Tech University, Yusuke Kuwayama, Resources for the Future, Sheila Olmstead, University of Texas at Austin and Alexandra Thompson, Resources for the Future

**UNCONVENTIONAL OIL AND GAS DEVELOPMENT, NEIGHBORHOOD CHOICE, AND EXTERNALITIES**

Chrystie Burr, University of Colorado Boulder  
Co-Author(s): Kathleen Nosal, University of Mannheim

**ESTIMATING INDIRECT ENVIRONMENTAL BENEFITS: FRACKING, COAL, AND AIR POLLUTION**

Hendrik Wolff, Simon Fraser University  
Co-Author(s): Reid Johnsen, University of California, Berkeley and Jacob LaRiviere, Microsoft Economics

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08:45 - 10:15

**RECREATION MODELING**

Room Peak 2

Chairperson: Steven Dundas, Oregon State University

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**COMBINING REVEALED AND STATED PREFERENCE DATA FOR VALUING RECREATION USE: A CASE STUDY FOR THE SAN JACINTO WILDERNESS**

Jose Sanchez, USDA Forest Service  
Co-Author(s): Kenneth Baerenklau, University of California, Riverside and Armando González-Cabán, USDA Forest Service

**INTERTEMPORAL SUBSTITUTION AND THE VALUE OF LEISURE TIME: EVIDENCE FROM RECREATIONAL ANGLERS IN THE GULF OF**

**MEXICO**

Patrick Lloyd-Smith, University of Alberta, Edmonton  
Co-Author(s): Joshua Abbott, Arizona State University, Wiktor Adamowicz,  
University of Alberta and Daniel Willard, Environmental Defense Fund

**MODEL SELECTION IN RECREATION MODELS**

Yongjie Ji, Iowa State University  
Co-Author(s): Hocheol Jeon, Iowa State University and Catherine Kling,  
Iowa State University

**WEATHER EFFECTS ON THE DEMAND FOR COASTAL  
RECREATIONAL FISHING: IMPLICATIONS FOR A CHANGING  
CLIMATE**

Steven Dundas, Oregon State University  
Co-Author(s): Roger von Haefen, North Carolina State University

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08:45 - 10:15

**ECOSYSTEMS I**

Room Peak 1

Chairperson: Emi Uchida, University of Rhode Island

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**SANCTIONS AND COOPERATION IN COLLECTIVE PAYMENTS FOR  
ECOSYSTEM SERVICES (PES) PROGRAMS**

David Kaczan, Duke University  
Co-Author(s): Alex Pfaff, Duke University, Luz Rodriguez, Duke University  
and Elizabeth Shapiro, Duke University

**CAPTIVE BREEDING OF ENDANGERED SPECIES: ANOTHER  
PERVERSE INCENTIVES STORY**

Richard Woodward, Texas A&M University  
Co-Author(s): Elizabeth A. Marchio, Texas A&M University, Kendra M.  
Williamson, Texas A&M University and Constance Woodman, Texas A&M  
University

**IMPLICATIONS OF MISSING BASELINES FOR ESTIMATING THE  
IMPACTS OF PROTECTED AREAS.**

Merlin Hanauer, Sonoma State University  
Co-Author(s): Paul Ferraro, Johns Hopkins University

**LONG-TERM ECONOMIC EFFECTS OF PAYMENTS FOR  
ENVIRONMENTAL SERVICE SCHEME: EVIDENCE FROM RURAL  
CHINA**

Emi Uchida, University of Rhode Island  
Co-Author(s): Aya Suzuki, University of Tokyo, Chengliang Wu, Beijing  
Forestry University and Xiaojun Yang, Peking University

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08:45 - 10:15

**SPONSORED SESSION 1 - ADAPTATION TO CLIMATE:  
AGRICULTURE AND LAND USE**

Room Coppertop II

Chairperson: Travis Warziniack, USDA Forest Service

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**ESTIMATING LAND-USE ADAPTATION TO CLIMATE CHANGE IN THE  
UNITED STATES**

Michael McWilliams, University of Michigan

Co-Author(s): Michael Moore, University of Michigan  
Discussant: Andrew Plantinga, University of California, Santa Barbara

**GOVERNMENT PROGRAMS, MORAL HAZARD, AND LAND-USE  
ADAPTATION TO WEATHER RISK IN THE U.S. MIDWEST**

Hsing-Hsiang Huang, University of Michigan  
Co-Author(s): Michael Moore, University of Michigan  
Discussant: Jeremy Weber, University of Pittsburgh

**CLIMATE, INSURANCE, AND INNOVATION: THE CASE OF THE U.S.  
AGRICULTURE**

Ruiqing Miao, Auburn University  
Discussant: Jason Murray, National Oceanic and Atmospheric  
Administration

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08:45 - 10:15

**ELECTRICITY I**

Room Peak 12

Chairperson: Elaine Frey, California State University, Long  
Beach

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**POWER FROM THE PEOPLE: OPPORTUNITY COST AND INCOME  
FUNGIBILITY IN SOLAR HOMES**

Andrea La Nauze, University of Melbourne

**WHAT IS GAINED BY SPATIALLY DIFFERENTIATING SOLAR  
SUBSIDIES?**

Anatolii Kokoza, University of Arizona

**THE EFFECT OF ELECTRICITY PRICES ON RESIDENTIAL SOLAR  
PHOTOVOLTAIC PANEL ADOPTION: FUKUSHIMA AS A NATURAL  
EXPERIMENT**

Takahiko Kiso, University of Aberdeen  
Co-Author(s): Yosuke Arino, Keio University and Ron Chan, University of  
Manchester

**THE EFFECTS OF CALIFORNIA SOLAR INITIATIVE REBATES ON THE  
ADOPTION OF SOLAR ENERGY**

Elaine Frey, California State University, Long Beach  
Co-Author(s): Saba Mojtahedi, California State University, Long Beach

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08:45 - 10:15

**VALUATION: PROPERTY VALUE I**

Room Peak 3

Chairperson: Ben Gilbert, University of Wyoming

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**VOTING WITH FEET AND VOTING WITH VOTES: USING HOUSING  
PRICES AND REFERENDA VOTING TO ESTIMATE THE NET VALUE  
OF OPEN SPACE CONSERVATION**

Corey Lang, University of Rhode Island

**ARE LAND VALUES RELATED TO AMBIENT AIR POLLUTION  
LEVELS? HEDONIC EVIDENCE FROM MEXICO CITY**

Lopamudra Chakraborti, Centro de Investigacion y Docencia Economicas  
Co-Author(s): David Heres, Centro de Investigacion y Docencia

Economicas and Danae Hernandez, Centro de Investigacion y Docencia Economicas

**PIPELINE INCIDENTS AND LOCAL AVERSION TO INFRASTRUCTURE EXPANSION**

Rich Sweeney, Boston College  
Co-Author(s): Evan Herrnstadt, Harvard University

**SOCIAL IMAGE, SIGNALING, AND SORTING: EVIDENCE FROM A DISCRETE CHOICE EXPERIMENT WITH SOLAR HOMES**

Ben Gilbert, University of Wyoming  
Co-Author(s): Nicholas Gorman, University of Wyoming

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10:30 - 12:00

**PARALLEL PAPERS SESSION 2**

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10:30 - 12:00

**POLITICAL ECONOMY**

Chairperson: Gal Hochman, Rutgers University

Room Peak 3

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**A LEADERSHIP CURSE? OIL SHOCKS AND THE SELECTION OF NATIONAL LEADERS**

Kodjovi Eklou, Universite de Sherbrooke

**OWNERSHIP RIGHTS VERSUS ACCESS RIGHTS ALLOCATION TO CRITICAL RESOURCES: AN EMPIRICAL STUDY OF THE ECONOMIC IMPACT OF CHANGES IN OIL GOVERNANCE**

Mohammad Kemal, Colorado School of Mines

**THE POLITICAL ECONOMY OF EMBODIED TECHNOLOGIES**

Gal Hochman, Rutgers University  
Co-Author(s): David Zilberman, University of California, Berkeley

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10:30 - 12:00

**SHALE, OIL, AND GAS II**

Chairperson: Timothy Fitzgerald, Texas Tech University

Room Coppertop III

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**ASYMMETRIC INFORMATION, ROYALTY DISTORTIONS, AND DRILLING DEADLINES: UNDERSTANDING OIL AND GAS LEASE CONTRACTS**

Evan Herrnstadt, Harvard University  
Co-Author(s): Ryan Kellogg, University of Michigan and Eric Lewis, U.S. Department of Justice

**THE TAX TREATMENT OF OIL AND GAS PRODUCTION IN THE UNITED STATES: ASSESSING THE OPTIONS**

Gilbert Metcalf, Tufts University

**WHEN EXTERNALITIES ARE TAXED: THE EFFECTS AND INCIDENCE OF PENNSYLVANIA'S IMPACT FEE ON SHALE GAS WELLS**

Katie Jo Black, University of Pittsburgh

Co-Author(s): Shawn McCoy, University of Pittsburgh and Jeremy Weber, University of Pittsburgh

**REGIONAL WINDFALLS OR BEVERLY HILLBILLIES? LOCAL AND ABSENTEE OWNERSHIP OF OIL AND GAS ROYALTIES**

Timothy Fitzgerald, Texas Tech University

Co-Author(s): Jason Brown, Federal Reserve Bank of Kansas City, James Sears, Montana State University and Jeremy Weber, University of Pittsburgh

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10:30 - 12:00

**ECOSYSTEMS II**

Room Peak 11

Chairperson: Michael Springborn, University of California, Davis

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**ADAPTIVE RESISTANCE MANAGEMENT WITH UNCERTAIN FITNESS COSTS**

Zachary Brown, North Carolina State University

Co-Author(s): Hyeongyul Roh, North Carolina State University

**SPATIAL-DYNAMIC MANAGEMENT OF STOCHASTIC SPECIES INVASIONS: SPATIAL-DYNAMIC INTERACTIONS, ECOLOGICAL CHARACTERISTICS OF INVASIONS, AND SOLUTION METHODS**

Kim Hall, Oregon State University

Co-Author(s): Heidi J Albers, University of Wyoming, Tom Dietterich, Oregon State University and Majid Alkaee Taleghan, Oregon State University

**ESTIMATING THE COST OF INVASIVE SPECIES CONTROL**

Sunny Jardine, University of Delaware

Co-Author(s): James Sanchirico, University of California, Davis

**THE HITCHHIKER'S GUIDE TO THE GREENERY: ESTIMATING DYNAMICS OF 150 YEARS OF TRADE-DRIVEN NON-NATIVE SPECIES INTRODUCTIONS VIA PLANT MATERIAL**

Michael Springborn, University of California, Davis

Co-Author(s): Andrew Liebhold, USDA Forest Service and Matthew MacLachlan, USDA ERS

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10:30 - 12:00

**CLIMATE POLICY: TRADE AND LEAKAGE**

Room Peak 1

Chairperson: Jevan Cherniwchan, University of Alberta

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**CAP(-TURE) AND TRADE: HOW MULTINATIONAL FIRMS CAPTURE ECONOMIC RENTS THROUGH ENVIRONMENTAL REGULATIONS**

Sanjay Patnaik, George Washington University

**THE ELUSIVE QUEST FOR CARBON LEAKAGE: MULTINATIONAL CORPORATIONS AND THE EU-ETS**

Michael Themann, Rheinisch-Westfaelisches Institut fuer Wirtschaftsforschung - Berlin

Co-Author(s): Nils aus dem Moore, Rheinisch-Westfaelisches Institut fuer Wirtschaftsforschung - Berlin and Philipp Grosskurth, Rheinisch-Westfaelisches Institut fuer Wirtschaftsforschung - Berlin

**NO CLEANER THAN THE REST: SUPPLYING FOREIGN FIRMS YIELDS NO ENVIRONMENTAL GAIN**

Paul Stroik, University of California, Irvine

**A "NEW TRADE" THEORY OF TRANSBOUNDARY POLLUTION**

Jevan Cherniwchan, University of Alberta

Co-Author(s): Liang Chen, Wuhan University

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10:30 - 12:00

**RESOURCES AND COMMON PROPERTY**

Room Peak 2

Chairperson: Christopher Costello, University of California, Santa Barbara

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**CREDIT AND NATURAL RESOURCE MANAGEMENT: A QUASI-EXPERIMENT FROM A RURAL CREDIT PROGRAM IN INNER MONGOLIA, CHINA**

Brian Robinson, McGill University

**ECONOMIC INCENTIVES AND CROWDING-IN SOCIAL NORMS IN A GROUNDWATER COMMONS**

Steven M. Smith, Haverford College

**PUBLIC CONTROL OF RATIONAL AND UNPREDICTABLE EPIDEMICS**

Charles Sims, University of Tennessee

Co-Author(s): David Finnoff, University of Wyoming and Suzanne O'Regan, University of Tennessee

**PROPERTY RIGHTS, REGULATORY CAPTURE, AND EXPLOITATION OF NATURAL RESOURCES**

Christopher Costello, University of California, Santa Barbara

Co-Author(s): Corbett Grainger, University of Wisconsin - Madison

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10:30 - 12:00

**REGULATORY ENFORCEMENT I**

Room Peaks 6,7,8

Chairperson: Jay Shimshack, University of Virginia

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**GREENER CARS OR GREENER DRIVERS? HOW CARBON AND FUEL TAXES INFLUENCE THE CHOICE AND USE OF CARS.**

Sumeet Gulati, University of British Columbia

Co-Author(s): Werner Antweiler, University of British Columbia

**ENVIRONMENTAL EFFECTS OF ANTIDUMPING TARIFFS: EVIDENCE FROM SOLAR PHOTOVOLTAICS**

Todd Gerarden, Harvard University

**DO GLOBAL BUSINESSES THAT JOIN VOLUNTARY CLIMATE INITIATIVES EMIT LESS CARBON? EXPLAINING FIRM PARTICIPATION AND CARBON EMISSIONS BY INTERNAL FIRM-LEVEL FACTORS AND DYNAMICS**

Lily Hsueh, Arizona State University

**DOES MANDATORY LABELING OF OUTFALL POINTS INFLUENCE POLLUTION AND COMPLIANCE? EVIDENCE FROM OHIO**

Jay Shimshack, University of Virginia

Co-Author(s): Xian Liu, Indiana University-Purdue University - Indianapolis



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10:30 - 12:00      **SPONSORED SESSION 2 - ADAPTATION TO CLIMATE: WEATHER AND MIGRATION**      Room Coppertop II  
Chairperson: Jason Murray, National Oceanic and Atmospheric Administration

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**MODELLING EQUILIBRIUM RESPONSES TO CLIMATE-INDUCED MIGRATION**

Sul-Ki Lee, Colorado School of Mines  
Co-Author(s): Jared Carbone, Colorado School of Mines  
Discussant: Daniel Phaneuf, University of Wisconsin-Madison

**AGRICULTURAL ADAPTATION TO DISASTER THROUGH LAND RENTAL MARKET: EVIDENCE FROM BANGLADESH**

Shaikh Eskander, London School of Economics  
Co-Author(s): Edward Barbier, University of Wyoming  
Discussant: Katherine Dickinson, University of Colorado Boulder

**THE IMPACT OF ADAPTATION ON PRICE VS. QUANTITY INSTRUMENTS**

Tamara Sheldon, University of South Carolina  
Co-Author(s): Stephie Fried, Carleton College  
Discussant: Travis Warziniack, USDA Forest Service

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10:30 - 12:00      **ELECTRICITY II**      Room Peak 12  
Chairperson: Shaun McRae, University of Michigan

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**MEASURING SPLIT INCENTIVES IN COMMERCIAL ELECTRICITY USAGE**

Maya Papineau, Carleton University  
Co-Author(s): Katrina Jessoe, University of California, Davis and David Rapson, University of California, Davis

**SPILLOVER EFFECTS OF ENERGY-INTENSIVE INDUSTRIES ON RESIDENTIAL ELECTRICITY DEMAND**

Nathaly Rivera, Michigan State University

**LOSS AVERSION, TEMPORAL FRAMING, AND HOUSEHOLD ENERGY DECISIONS**

Carrie Gill, University of Rhode Island  
Co-Author(s): Stephen Atlas, University of Rhode Island

**PRICE PERCEPTION AND ELECTRICITY DEMAND WITH NONLINEAR TARIFFS**

Shaun McRae, University of Michigan  
Co-Author(s): Robyn Meeks, University of Michigan

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10:30 - 12:00      **DEVELOPING COUNTRIES I**      Room Peak 10  
Chairperson: Heidi J Albers, University of Wyoming

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**COLLECTIVE INCENTIVES INSTITUTIONS IN REGULATING SMALL-SCALE GOLD MINING: A FIELD-LAB EXPERIMENT ON CONDITIONAL COOPERATION, COMPLIANCE AND FAIRNESS UNDER GROUP**

**REWARDS**

Luz Rodriguez, Duke University  
Co-Author(s): Alexander Pfaff, Duke University and Maria Alejandra Velez,  
Universidad de los Andes

**THE COST OF CONSERVATION IN DEVELOPING COUNTRIES:  
SATELLITE EVIDENCE FROM CHINA'S FARMLAND PROTECTION  
PROGRAM**

Peter Christensen, University of Illinois, Urbana-Champaign

**THE VALUE OF ACTING LOCAL: MICRO-INSTITUTIONS AND  
ADOPTION OF AN ENVIRONMENTAL HEALTH-IMPROVING  
TECHNOLOGY**

Marc Jeuland, Duke University  
Co-Author(s): Subhrendu Pattanayak, Duke University and Faraz Usmani,  
Duke University

**MARINE PROTECTED AREAS IN LOW-INCOME COUNTRIES: LABOR  
ALLOCATION, LOCATION DECISIONS, AND INCOMPLETE  
ENFORCEMENT**

Heidi J Albers, University of Wyoming  
Co-Author(s): Roger Madrigal, CATIE, Louis Preonas, University of  
California, Berkeley and Elizabeth JZ Robinson, University of Reading

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10:30 - 12:00

**VALUATION: METHODS AND APPLICATION**

Room Peak 9

Chairperson: Alan Krupnick, Resources for the Future

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**ALTERNATIVE VALUE ELICITATION QUESTIONS IN CONTINGENT  
VALUATION: A NEW HOPE**

Christian Vossler, University of Tennessee  
Co-Author(s): J. Scott Holladay, University of Tennessee

**PRICE PREMIA FOR USDA ORGANIC CERTIFIED GROCERY ITEMS  
AND NUTRITIONAL QUALITY**

Tyler Mangin, University of Colorado Boulder

**ESTIMATING TOTAL ECONOMIC VALUE OF THE NATIONAL PARK  
SYSTEM USING CHOICE EXPERIMENTS: RANK ORDERED LOGIT  
MODELS AND RANKING A MORE REPRESENTATIVE SAMPLE**

John Loomis, Colorado State University  
Co-Author(s): Linda Bilmes, Harvard University and Michelle Haefele,  
Colorado State University

**PREFERENCES FOR EQUALITY IN ENVIRONMENTAL OUTCOMES**

Alan Krupnick, Resources for the Future  
Co-Author(s): Maureen Cropper, University of Maryland, Alan Krupnick,  
Resources for the Future and William Raich, Resources for the Future

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11:45 - 01:45

**BOXED LUNCH**

Room Peaks 4,5

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12:15 - 01:45

**POSTER SESSION**

Room Third Floor  
South Foyer

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**COMPARING PERFORMANCE OF DISCRETE CHOICE MODELS IN STATED CHOICE METHODS: A PREDICTION-BASED APPROACH USING PREFERENCE ORDER DATA**

Yau-Huo Shr, Pennsylvania State University  
Co-Author(s): Richard Ready, Montana State University

**INDIVIDUAL AND COMMUNITY-LEVEL INFLUENCES ON WILDFIRE RISK MITIGATION DECISIONS ON PRIVATE PROPERTY**

James Meldrum, University of Colorado Boulder  
Co-Author(s): Hannah Brenkert-Smith, University of Colorado Boulder, Patricia Champ, USDA Forest Service and Travis Warziniack, USDA Forest Service

**MORE EVIDENCE FOR IMPACTS OF CLIMATE CHANGE ON ENERGY CONSUMPTION**

Hocheol Jeon, Iowa State University

**DO PEOPLE LEARN FROM THE MISFORTUNE OF THEIR NEIGHBORS? AN EMPIRICAL ANALYSIS OF THE EFFECT OF EXPERIENCE ON NATURAL DISASTER DAMAGE IN THE UNITED STATES**

Patrick Prendergast, University of Rhode Island

**BAD WEATHER, SAFE DAY? THE EFFECT OF WEATHER AND POLLUTION ON CRIME**

Bo Liu, Georgia State University

**DO CONSUMERS RESPOND TO MARGINAL PRICE UNDER INCREASING BLOCK TARIFFS WHEN RATE INFORMATION IS CHEAP? EVIDENCE FROM RESIDENTIAL WATER DEMAND.**

Corey Lott, University of California, Santa Barbara

**RECREATIONAL DIVER WILLINGNESS TO PAY FOR GOLIATH GROUPER ENCOUNTERS DURING THE MONTHS OF THEIR SPAWNING AGGREGATION OFF EASTERN FLORIDA, USA**

Geoffrey Shideler, University of Miami  
Co-Author(s): Pierce Brett, University of Miami

**THE DYNAMICS OF A FISHERY FACED WITH THE AQUACULTURE DILEMMA**

Andreea L. Cojocaru, University of Stavanger  
Co-Author(s): Frank Asche, University of Stavanger

**THE EFFECT OF TROPICAL CYCLONES ON ECONOMIC SECTORS WORLDWIDE: A PANEL DATA ANALYSIS USING GEODATA**

Sven Kunze, Heidelberg University

**THE IMPACT OF RESTRUCTURING ON US ELECTRICITY MARKET INVESTMENT**

Alex Hill, University of Colorado Boulder

**TURNING THE TIDE: IMPACT OF FRAMING ON COASTAL WATER  
QUALITY DECISIONS**

Caroline Noblet, University of Maine  
Co-Author(s): Kathleen Bell, University of Maine

**VALUING CARBON ABATEMENT BENEFITS OF INTERMITTENT  
RENEWABLE ENERGY**

Miguel Castro, Michigan State University

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01:00 - 05:15      **SPECIAL SESSION - THE 2010 GULF OF MEXICO OIL SPILL:  
ESTIMATING THE ECONOMIC LOSSES**      Room Imperial  
Ballroom

Chairpersons: Norman Meade, NOAA and Roger Von Haefen,  
North Carolina State University

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01:45 - 03:15      **PARALLEL PAPERS SESSION 3**

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01:45 - 03:15      **AIR POLLUTION I**      Room Peak 12

Chairperson: Corbett Grainger, University of Wisconsin -  
Madison

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**AVOIDANCE BEHAVIOR AGAINST AIR POLLUTION: DO PEOPLE  
RESPOND TO PM2.5 INFORMATION?**

Tong Liu, Hong Kong University of Science and Technology  
Co-Author(s): Guojun He, Hong Kong University of Science and  
Technology and Alexis Lau, Hong Kong University of Science and  
Technology

**AIR POLLUTION AND CRIMINAL ACTIVITY: EVIDENCE FROM  
CHICAGO MICRODATA**

Erich Muehlegger, University of California, Davis  
Co-Author(s): Evan Herrnstadt, Harvard University

**AIR POLLUTION AND LABOR SUPPLY: EVIDENCE FROM SOCIAL  
SECURITY DATA**

Ulrich Wagner, University of Mannheim  
Co-Author(s): Felix Holub, University of Mannheim and Laura Hospido,  
Bank of Spain

**HOW STATE REGULATORS COMPLY WITH FEDERAL STANDARDS:  
STRATEGIC AMBIENT POLLUTION MONITOR SITING**

Corbett Grainger, University of Wisconsin - Madison  
Co-Author(s): Andrew Schreiber, University of Wisconsin - Madison and  
Wonjun Chang, University of Wisconsin - Madison

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01:45 - 03:15      **LEAKAGE AND COMPETITIVENESS IN CLIMATE CHANGE  
POLICY**      Room Coppertop II

Chairperson: Peter Maniloff, Colorado School of Mines

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**TRADE BETWEEN MASS- AND RATE-BASED REGULATORY REGIMES: BAD FOR EMISSIONS?**

Carolyn Fischer , Resources for the Future

**DOES CLIMATE CHANGE POSE A RISK TO COMPETITIVENESS? - GLOBAL FIRM LEVEL EVIDENCE**

Ralf Martin, Imperial College London

Co-Author(s): Antoine Dechezlepretre, London School of Economics, Stefania Lovo, London School of Economics and Misato Sato, London School of Economics

**MEASURING LEAKAGE RISK**

Meredith Fowlie, University of California, Berkeley

Co-Author(s): Mar Reguant, Northwestern and Stephen Ryan, University of Texas at Austin

**UPDATING ALLOCATION OF EMISSIONS ALLOWANCES**

Peter Maniloff, Colorado School of Mines

Co-Author(s): Ian Lange, Colorado School of Mines

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01:45 - 03:15

**SHALE, OIL, AND GAS III**

Chairperson: Charles Mason, University of Wyoming

Room Coppertop III

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**RENTS, YIELDS AND HYDRAULIC FRACTURING: THE CASE OF THE BAKKEN**

Timothy Rakitan, Iowa State University

**SUPPLY-SIDE COINTEGRATION IN NATURAL GAS PRICES AND CRUDE OIL PRICES**

Gavin Roberts, University of Wyoming

Co-Author(s): Benjamin Gilbert, University of Wyoming

**OPTION VALUE, LEARNING, AND LOCAL OPPOSITION TO HYDRAULIC FRACTURING**

Joshua Hess, Colorado State University

Co-Author(s): Harvey Cutler, Colorado State University, Terrence Iverson, Colorado State University and Dale Manning, Colorado State University

**THE IMPACT OF NEW TECHNOLOGIES ON NATURAL GAS WELL PRODUCTIVITY**

Charles Mason, University of Wyoming

Co-Author(s): Gavin Roberts, University of Wyoming

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01:45 - 03:15

**FISHERIES I**

Chairperson: Joshua K. Abbott, Arizona State University

Room Peak 2

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**A MODEL OF QUOTA ARBITRAGE IN MULTISPECIES FISHERIES**

Jorge Holzer, University of Maryland

Co-Author(s): Geret DePiper, NOAA Fisheries

**MANAGING FOR A DIVERSE PORTFOLIO: THE VALUE OF GENETIC VARIATION IN SALMON FOR RESILIENCE UNDER ENVIRONMENTAL CHANGE**

Amanda Faig, University of California, Davis  
Co-Author(s): Michael Springborn, University of California, Davis

**SCALLOPS AND SHELLFISH FISHERMEN: A BIO-ECONOMETRIC ANALYSIS**

Brian Reed, Yale School of Forestry & Environmental Studies  
Co-Author(s): Eli Fenichel, Yale School of Forestry & Environmental Studies and Seong Do Yun, Yale School of Forestry & Environmental Studies

**THE BENEFITS OF ESCAPING RECREATIONAL "DERBIES": EVIDENCE FROM A POLICY TRIAL**

Joshua K. Abbott, Arizona State University  
Co-Author(s): Wiktor Adamowicz, University of Alberta, Edmonton, Patrick Lloyd-Smith, University of Alberta, Edmonton and Daniel Willard, Environmental Defense Fund

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01:45 - 03:15

**INCIDENCE AND DISTRIBUTIONAL EFFECTS**

Room Peak 10

Chairperson: Billy Pizer, Duke University

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**THE DISTRIBUTIONAL EFFECTS OF ADOPTING A CARBON TAX**

Stephie Fried, Carleton College  
Co-Author(s): Kevin Novan, University of California, Davis and William Peterman, Federal Reserve Board of Governors

**WHAT IMPACTS SOLAR SUBSIDY INCIDENCE?**

Jacquelyn Pless, Colorado School of Mines  
Co-Author(s): Ruben Lobel, University of Pennsylvania and Arthur van Benthem, University of Pennsylvania

**CARBON TAXATION, INEQUALITY AND ENGEL'S LAW - THE DOUBLE DIVIDEND OF REDISTRIBUTION**

David Klenert, Mercator Research Institute on Global Commons and Climate Change (MCC)  
Co-Author(s): Ottmar Edenhofer, Mercator Research Institute on Global Commons and Climate Change (MCC); Potsdam Institute for Climate Impact Research (PIK); Technical University Berlin, Linus Mattauch, Mercator Research Institute on Global Commons and Climate Change (MCC) and Gregor Schwerhoff, Mercator Research Institute on Global Commons and Climate Change (MCC)

**THE INEQUITY OF POLLUTION TAXES**

Billy Pizer, Duke University  
Co-Author(s): Steven Sexton, Duke University

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01:45 - 03:15

**ENVIRONMENTAL REGULATION AND LABOR DEMAND -- RESEARCH USING MICRODATA**

Room Peak 11

Chairperson: Wayne Gray, Clark University

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**ENVIRONMENTAL REGULATION, POLLUTION REDUCTION AND LABOR DEMAND: EVIDENCE FROM TEXTILE PRINTING AND DYEING INDUSTRY IN CHINA**

Liu Mengdi, Nanjing University

Co-Author(s): Zhang Bing, Nanjing University and Ronald Shadbegian, National University of Singapore

**ENVIRONMENTAL REGULATION AND INPUT REALLOCATION: EVIDENCE FROM U.S. MANUFACTURING PLANTS**

Ron Shabegian, National University of Singapore

Co-Author(s): Randy Becker, U.S. Census Bureau, Center for Economic Studies, Ann Ferris, US EPA and Christos Makridis, Stanford University

**INDUSTRIAL COMPETITIVENESS AND STATE-LEVEL CLIMATE POLICY**

Brendan Casey, Clark University

Co-Author(s): Wayne Gray, Clark University, Joshua Linn, Resources for the Future and Richard Morgenstern, Resources for the Future

**GROSS VS NET EMPLOYMENT EFFECTS OF ENVIRONMENTAL REGULATORY STRINGENCY**

Wayne Gray, Clark University

Co-Author(s): Ann Ferris, US EPA and Ronald Shadbegian, National University of Singapore

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01:45 - 03:15

**ENERGY ECONOMICS**

Room Peak 3

Chairperson: Andrew Leach, University of Alberta

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**WEAK LINKS AND ENERGY PRODUCTIVITY: MEASURING AND EXPLAINING INTERNATIONAL DIFFERENCES IN ENERGY PRODUCTIVITY**

Botong Zhang, University of California, Los Angeles

Co-Author(s): Christos Makridis, Stanford University

**MARKET POWER, CLIMATE CHANGE, AND COAL RETIREMENT: EVIDENCE FOR THE TEXAS ELECTRICITY MARKET**

Matt Woerman, University of California, Berkeley

**EXPANDING CROSS-BORDER ELECTRICITY COOPERATION AND TRADE IN SOUTH ASIA**

Mike Toman, World Bank

**OIL SANDS, GREENHOUSE GAS POLICY, AND THE OIL PRICE CRASH**

Andrew Leach, University of Alberta

Co-Author(s): Branko Boskovic, University of Alberta

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01:45 - 03:15

**CLIMATE CHANGE: WEATHER II**

Room Peaks 6,7,8

Chairperson: Olivier Deschenes, University of California, Santa Barbara

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**ADAPTATION AND THE MORTALITY EFFECTS OF TEMPERATURE ACROSS US CLIMATE REGIONS**

Nolan Miller, University of Illinois at Urbana-Champaign  
Co-Author(s): Garth Heutel, Georgia State University and David Molitor,  
University of Illinois at Urbana-Champaign

**CATCHING A COLD: THE DYNAMIC RELATIONSHIP BETWEEN  
TEMPERATURE AND HEALTH**

Corey White, University of California, Santa Barbara

**WEATHER, TRAFFIC ACCIDENTS, AND EXPOSURE TO CLIMATE  
CHANGE**

Kevin Roth, University of California, Irvine  
Co-Author(s): Benjamin Leard, Resources for the Future

**MAYBE NEXT MONTH? TEMPERATURE SHOCKS, CLIMATE CHANGE,  
AND DYNAMIC ADJUSTMENTS IN BIRTH RATES**

Olivier Deschenes, University of California, Santa Barbara

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01:45 - 03:15

**TRANSPORTATION I**

Room Peak 9

Chairperson: Gabriel Lade, Iowa State University

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**CHARGING DRIVERS BY THE POUND: THE EFFECT OF THE VED  
SYSTEM IN THE UK**

Davide Cerruti, University of Maryland  
Co-Author(s): Anna Alberini, University of Maryland and Joshua Linn,  
Resources for the Future

**STRATEGIC RESPONSE TO ENVIRONMENTAL REGULATION:  
THEORY, AND EVIDENCE FROM THE U.S. FREIGHT TRUCK  
INDUSTRY**

Matthew Zaragoza-Watkins, Environmental Defense Fund and  
Massachusetts Institute of Technology  
Co-Author(s): Katherine Rittenhouse, Environmental Defense Fund

**PASS-THROUGH AND MARKET STRUCTURE: EVIDENCE FROM THE  
RENEWABLE FUEL STANDARD**

Gabriel Lade, Iowa State University  
Co-Author(s): James Bushnell, University of California, Davis

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03:30 - 05:00

**PARALLEL PAPERS SESSION 4**

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03:30 - 05:00

**MARKET MECHANISMS**

Room Peak 12

Chairperson: Sebastian Rausch, ETH Zurich

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**WHEN DO FIRMS GO GREEN? COMPARING PRICE INCENTIVES WITH  
COMMAND AND CONTROL REGULATIONS IN INDIA**

Ann Harrison, University of Pennsylvania  
Co-Author(s): Ann Harrison, University of Pennsylvania, Leslie Martin,  
University of Melbourne and Shanthi Nataraj, RAND Corporation



**PRICES VERSUS QUANTITIES WITH POLICY UPDATING**

Brian Prest, Duke University  
Co-Author(s): William Pizer, Duke University

**THE EFFECTS OF CONSIGNMENT SALES ON EMISSION ALLOWANCE AUCTIONS**

William Shobe, University of Virginia  
Co-Author(s): Charles Holt, University of Virginia

**COMBINING PRICE AND QUANTITY CONTROLS UNDER PARTITIONED ENVIRONMENTAL REGULATION**

Sebastian Rausch, ETH Zurich  
Co-Author(s): Jan Abrell, ETH Zurich

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03:30 - 05:00

**FISHERIES II**

Room Peak 11

Chairperson: Scott Barrett, Columbia University

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**OBSERVER EFFECTS IN THE GULF OF MAINE GROUND FISH SECTOR**

Angela Muench, NOAA Northeast Fisheries Science Center  
Co-Author(s): Chad Demarest, NOAA Northeast Fisheries Science Center, SSB

**SPATIAL BEHAVIOR AND THE VALUE OF SPATIALLY DIFFERENTIATED RESOURCE MANAGEMENT: EVIDENCE FROM THE GREAT BARRIER REEF COMMERCIAL FISHERY**

Gabriel Sampson, University of California, Davis

**CREATING LOCAL ECONOMIC VALUE THROUGH ARTISANAL FISHERIES MANAGEMENT: AN ECOSYSTEM SERVICE VALUATION APPROACH**

Jacob Salcone, Colorado State University  
Co-Author(s): Dale Manning, Colorado State University

**PROPERTY RIGHTS VS. COOPERATIVE AGREEMENTS: THE OCEAN FISHERIES GAME**

Scott Barrett, Columbia University

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03:30 - 05:00

**CARBON OFFSETS**

Room Peak 3

Chairperson: Leslie Martin, University of Melbourne

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**BIOPHYSICAL AND ECONOMIC ANALYSIS OF CARBON DIOXIDE REMOVAL OPTIONS: FOREST SEQUESTRATION AND WOODY BIOMASS PRODUCTION FOR BECCS**

Alice Favero, Georgia Institute of Technology

**ASSESSING THE ADDITIONALITY OF THE CLEAN DEVELOPMENT MECHANISM IN CHINA WITH EMISSIONS FORECASTS**

Gabriel Chan, University of Minnesota  
Co-Author(s): Joseph Aldy, Harvard University

**ANTICIPATION OF PES INCENTIVES AND ENVIRONMENTAL SERVICE GOALS**

Augustina Odame, Yale School of Forestry & Environmental Studies  
Co-Author(s): Vic Adamowicz, University of Alberta, Alicia Entem,  
Smithsonian Tropical Research Institute and Eli Fenichel, Yale School of  
Forestry & Environmental Studies

**SUPPLY AND IMPACT OF VOLUNTARY CARBON OFFSETS:  
PARTICIPATION OF INDIA'S MANUFACTURING FIRMS IN THE CLEAN  
DEVELOPMENT MECHANISM**

Leslie Martin, University of Melbourne  
Co-Author(s): Kim Liu, University of Melbourne

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03:30 - 05:00

**ENERGY EFFICIENCY I**

Room Coppertop III

Chairperson: Garth Heutel, Georgia State University

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**INVESTMENT IN THE HEAT OF THE MOMENT: HEATING AND  
COOLING UPGRADES IN RESPONSE TO EXTREME WEATHER**

Alecia Cassidy, University of Michigan

**ENERGY EFFICIENCY SAVINGS IN LOW-INCOME HOUSEHOLDS:  
EVIDENCE FROM THE CALIFORNIA ENERGY SAVINGS ASSISTANCE  
PROGRAM**

Joshua Blonz, University of California, Berkeley

**CONSUMER INATTENTION AND ENERGY INTENSIVE DURABLES: A  
REJOINDER AND NEW EVIDENCES FOR THE US APPLIANCE  
MARKET**

Sebastien Houde, University of Maryland  
Co-Author(s): Erica Myers, University of Illinois, Urbana-Champaign

**PROSPECT THEORY AND ENERGY EFFICIENCY**

Garth Heutel, Georgia State University

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03:30 - 05:00

**EXPERIMENTS II**

Room Peak 9

Chairperson: Tsvetan Tsvetanov, University of Kansas

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**TRIGGERING COOPERATION**

Peter Martinsson, University of Gothenburg  
Co-Author(s): Martin Dufwenberg, University of Arizona and University of  
Gothenburg, Gunnar Köhlin, University of Gothenburg and Haileselassie  
Medhin, University of Gothenburg

**SOCIAL IDENTITY, SOCIAL PREFERENCES, AND THE PROVISION OF  
PUBLIC GOODS: EVIDENCE FROM SWITZERLAND**

Marcella Veronesi, University of Verona and ETH Zurich  
Co-Author(s): Devesh Rustagi, Goethe University Frankfurt

**AN ONLINE EXPERIMENT ON COOPERATION AND GROUPISHNESS  
ACROSS URBAN DISTRICTS**

Carlo Gallier, Centre for European Economic Research (ZEW)  
Co-Author(s): Timo Goeschl, University of Heidelberg, Martin Kesternich,  
Centre for European Economic Research (ZEW), Johannes Lohse,  
University of Heidelberg, Christiane Reif, Centre for European Economic

Research (ZEW) and Daniel Roemer, Centre for European Economic Research (ZEW)

**NUDGING ENERGY EFFICIENCY ADOPTION: EVIDENCE FROM A FIELD EXPERIMENT**

Tsvetan Tsvetanov, University of Kansas  
Co-Author(s): Kenneth Gillingham, Yale University

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03:30 - 05:00

**BIOFUELS**

Room Coppertop II

Chairperson: Mark Jacobsen, University of California, San Diego

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**INVESTMENT IN CORN-ETHANOL PLANTS IN THE MIDWESTERN UNITED STATES**

C.-Y. Cynthia Lin Lawell, University of California, Davis  
Co-Author(s): Karen Thome, USDA Economic Research Service

**LAND USE IMPACT OF THE RENEWABLE FUEL STANDARD - EVIDENCE FROM CHANGES IN THE CONSERVATION RESERVE PROGRAM ENROLLMENT**

Deepak Rajagopal, University of California, Los Angeles  
Co-Author(s): Jenny Ifft, Cornell University and Ryan Weldzius, University of California, Los Angeles

**EXAMINING THE EFFECTS OF UNCERTAINTY ON SECOND-GENERATION BIOFUEL INVESTMENT BY USING A TWO STOCHASTIC PROCESS APPROACH**

Evan Markel, University of Tennessee  
Co-Author(s): Charles Sims, University of Tennessee

**BIOFUEL AND THE REGULATION OF LIFE-CYCLE EMISSIONS ACROSS BOUNDARIES**

Mark Jacobsen, University of California, San Diego  
Co-Author(s): William Leung, University of California, Davis

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03:30 - 05:00

**LAND USE**

Room Peak 10

Chairperson: David Newburn, University of Maryland

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**CURRENT USE PROPERTY TAXATION IN PROTECTING RURAL LAND: AN APPLICATION USING DURATION ANALYSIS**

Darshana Udayanganie, Central Michigan University

**MEETING WATER QUALITY STANDARDS BY ALTERING LAND USE PATTERNS: AN ANALYSIS OF PRICE VS. QUANTITY BASED POLICY INSTRUMENTS**

Douglas Wrenn, Pennsylvania State University  
Co-Author(s): Allen Klaiber, The Ohio State University

**BURNING DOWN THE HOUSE: HOUSING CHARACTERISTICS AND THE POLITICAL ECONOMY OF WILDFIRE SUPPRESSION**

Matthew Wibbenmeyer, University of California, Santa Barbara  
Co-Author(s): Sarah Anderson, University of California, Santa Barbara,

Andrew Plantinga, University of California, Santa Barbara and Randall Walsh, University of Pittsburgh

**ADDITIONALITY AND FOREST CONSERVATION POLICY FOR RESIDENTIAL DEVELOPMENT**

David Newburn, University of Maryland  
Co-Author(s): Jeffrey Ferris, University of Maryland

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03:30 - 05:00

**REGULATING FIRMS**

Room Peaks 6,7,8

Chairperson: Jonathan Hughes, University of Colorado Boulder

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**MANAGEMENT AND POLLUTION**

Mark Curtis, Wake Forest University

**THE IMPACTS OF ENVIRONMENTAL REGULATION IN THE PRESENCE OF HETEROGENOUS FIRMS**

Scott Holladay, University of Tennessee  
Co-Author(s): Lawrence LaPlue, University of Tennessee

**RATE OF RETURN REGULATION AND ENVIRONMENTAL EXTERNALITIES: EVIDENCE FROM METHANE LEAKS**

Catherine Hausman, University of Michigan  
Co-Author(s): Lucija Muehlenbachs, University of Calgary

**WHO (ELSE) BENEFITS FROM ELECTRICITY DEREGULATION? RAILROADS, INFORMATION AND PRICE DISCRIMINATION**

Jonathan Hughes, University of Colorado Boulder  
Co-Author(s): Ian Lange, Colorado School of Mines

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03:30 - 05:00

**CLIMATE CHANGE: ASSESSING THE IMPACTS**

Room Peak 2

Chairperson: Justin Caron, HEC Montreal

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**TEMPERATURE AND ECONOMIC GROWTH: NEW EVIDENCE FROM TOTAL FACTOR PRODUCTIVITY**

Peng Zhang, University of California, Santa Barbara

**LONG-TERM IMPACTS OF HIGH TEMPERATURES ON ECONOMIC PRODUCTIVITY**

Jason Russ, George Washington University  
Co-Author(s): Paul Carrillo, George Washington University and Ram Fishman, Tel Aviv University

**TEMPERATURE AND GROWTH: A PANEL ANALYSIS OF THE UNITED STATES**

Bridget Hoffmann, Inter-American Development Bank  
Co-Author(s): Riccardo Colacito, University of North Carolina Chapel Hill and Toan Phan, University of North Carolina Chapel Hill

**PER CAPITA INCOME, CONSUMPTION PATTERNS, ENERGY DEMAND AND CO2 EMISSIONS**

Justin Caron, HEC Montreal  
Co-Author(s): Thibault Fally, University of California, Berkeley

11TH JUNE 2016

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09:00 - 10:30 **PARALLEL PAPERS SESSION 5**

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09:00 - 10:30 **ELECTRICITY III** Room Peak 11  
Chairperson: Ujjayant Chakravorty, Tufts University

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**HYDRO POWER. MARKET MIGHT.**  
Grant McDermott, University of California, Santa Barbara

**WASTE NOT: CAN BIOGAS DELIVER A DOUBLE DIVIDEND?**  
Hope Thompson, University of Michigan  
Co-Author(s): Robyn Meeks, University of Michigan and Katharine Sims,  
Amherst College

**DO ENERGY SAVINGS GROW WITH (SHADE) TREES?**  
Joe Maher, National Socio-Environmental Synthesis Center

**CHINA'S CLEAN ENERGY STRATEGY: SOLAR, SHALE GAS OR  
NUCLEAR?**  
Ujjayant Chakravorty, Tufts University  
Co-Author(s): Carolyn Fischer, Resources for the Future and Marie-Helene  
Hubert, University of Rennes

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09:00 - 10:30 **FORESTRY: DEFORESTATION** Room Peak 1  
Chairperson: Teevrat Garg, University of California, San Diego  
and London School of Economics

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**ASSESSING THE IMPACT OF PROTECTED AREAS ON FOREST  
RECOVERY AND REFORESTATION**  
Jordi Honey-Rosés, University of British Columbia  
Co-Author(s): Kathy Baylis, University of Illinois, Urbana-Champaign and  
Isabel Ramirez, Universidad Nacional Autonoma de Mexico (UNAM)

**CONSEQUENCES OF PROTECTED AREAS FOR FOREST  
EXTRACTION AND HUMAN WELL-BEING: EVIDENCE FROM NEPAL**  
Aparna Howlader, University of Illinois Urbana-Champaign  
Co-Author(s): Amy Ando, University of Illinois Urbana-Champaign

**COMMUNITY-MANAGED FORESTS AND HOUSEHOLD WELFARE:  
EMPIRICAL EVIDENCE FROM NEPAL**  
Jayash Paudel, University of Massachusetts Amherst

**THE ROLE OF LOCAL GOVERNMENT IN PRESERVING THE  
COMMONS: THEORY AND EVIDENCE FROM INDONESIA**  
Teevrat Garg, University of California, San Diego and London School of  
Economics  
Co-Author(s): Caterina Gennaioli, London School of Economics and  
Stefania Lovo, London School of Economics

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09:00 - 10:30

**VALUATION: PROPERTY VALUE II**

Room Peak 2

Chairperson: Sathya Gopalakrishnan, Ohio State University

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**HOUSEHOLD LOCATION DECISIONS AND THE VALUE OF CLIMATE AMENITIES**

Paramita Sinha, RTI International

Co-Author(s): Maureen Cropper, University of Maryland

**ASSESSING THE ECONOMIC BENEFITS OF STRUCTURAL FLOOD PROTECTION: A REPEAT-SALES APPROACH FROM THE ENGLISH HOUSING MARKET**

Allan Beltran, University of Birmingham

Co-Author(s): Robert Elliott, University of Birmingham and David Maddison, University of Birmingham

**MIGRATION AS REVEALED PREFERENCE FOR AMENITIES: EVIDENCE FROM TAX FILING LOCATIONS**

Brett Close, University of Wisconsin - Madison

Co-Author(s): Daniel Phaneuf, University of Wisconsin - Madison

**COASTAL ADAPTATION TO CLIMATE CHANGE AND THE CAPITALIZED IMPACT OF BEACH NOURISHMENT**

Sathya Gopalakrishnan, Ohio State University

Co-Author(s): Yun Qiu, Ohio State University

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09:00 - 10:30

**REGULATORY ENFORCEMENT II**

Room Peak 12

Chairperson: David Finnoff, University of Wyoming

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**MANDATORY MINIMUM PENALTIES FOR ENVIRONMENTAL ENFORCEMENT**

Mary Evans, Claremont McKenna College

Co-Author(s): J.R. DeShazo, University of California Los Angeles

**REGULATING THE REGULATORS? FEDERAL OVERSIGHT OF STATE ENVIRONMENTAL ENFORCEMENT**

Sarah Stafford, College of William and Mary

Co-Author(s): Mary Evans, Claremont McKenna College

**WHEN THREATS BECOME CREDIBLE: A NATURAL EXPERIMENT OF ENVIRONMENTAL ENFORCEMENT FROM FLORIDA**

Wesley Blundell, University of Arizona

**NATURAL VS ANTHROPOGENIC INSURANCE: MANAGING A NATIVE SPECIES FACING INVASION RISKS INVOLVING MULTI-STABLE OUTCOMES**

David Finnoff, University of Wyoming

Co-Author(s): Kevin Berry, Yale University, Richard Horan, Michigan State University, Carson Reeling, Michigan State University and Jason Shogren, University of Wyoming

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09:00 - 10:30

**RESOURCE DEVELOPMENT AND EXTRACTION**

Room Peak 9

Chairperson: Martin Stuermer, Federal Reserve Bank of Dallas

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**CREATING ANTICOMMONS: HISTORICAL LAND PRIVATIZATION AND MODERN NATURAL RESOURCE USE**

Bryan Leonard, University of California, Santa Barbara  
Co-Author(s): Dominic Parker, University of Wisconsin, Madison

**SOCIAL LICENSING OF MINERAL RESOURCES: FORMAL AND INFORMAL ROADBLOCKS FOR AVAILABILITY**

Brett Jordan, Colorado School of Mines

**OPTIMAL GROUNDWATER EXTRACTION UNDER STOCHASTIC CLIMATE CHANGE.**

Nicolas Quintana Ashwell, Kansas State University  
Co-Author(s): Nathan Hendricks, Kansas State University and Jeff Peterson, University of Minnesota

**NON-RENEWABLE RESOURCES, EXTRACTION TECHNOLOGY AND ENDOGENOUS GROWTH**

Martin Stuermer, Federal Reserve Bank of Dallas  
Co-Author(s): Gregor Schwerhoff, Potsdam Institute for Climate Impact Research

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09:00 - 10:30

**ENVIRONMENTAL AGREEMENTS**

Room Peaks 6,7,8

Chairperson: Glenn Sheriff, US Department of State

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**(UN)FAIR DELEGATION: EXPLORING THE STRATEGIC USE OF EQUITY RULES IN INTERNATIONAL CLIMATE NEGOTIATIONS**

Andreas Lange, University of Hamburg  
Co-Author(s): Claudia Schwirplies, University of Hamburg

**THE STRATEGIC DIMENSION OF FINANCING GLOBAL PUBLIC GOODS**

Ulrike Kornek, Mercator Research Institute on Global Commons and Climate Change  
Co-Author(s): Ottmar Edenhofer, Mercator Research Institute on Global Commons and Climate Change

**EVALUATING THE PARIS AGREEMENT'S MITIGATION PLEDGES WITH STATISTICAL FORECASTING MODELS**

Cuicui Chen, Harvard University  
Co-Author(s): Joseph Aldy, Harvard University and William Pizer, Duke University

**WHAT IS THE IMPLICIT BURDEN SHARING ARRANGEMENT FOR INTERNATIONAL ALLOCATION OF GREENHOUSE GAS REDUCTION REVEALED BY SUBMISSIONS TO THE 2015 PARIS AGREEMENT?**

Glenn Sheriff, US Department of State

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09:00 - 10:30

**AIR POLLUTION II**

Room Coppertop III

Chairperson: Paulina Oliva, University of California, Santa Barbara

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**THE IMPACT OF ENERGY POLICY ON RESPIRATORY HEALTH AND MORTALITY**

Alex Hollingsworth, Indiana University  
Co-Author(s): Ivan Rudik, Iowa State University

**THE WELFARE COSTS OF AIR POLLUTION INDUCED MEDICAL EXPENDITURES**

Austin Williams, University of Wisconsin - Madison

**THE EFFECT OF POLLUTION ON HEALTH AND SPENDING: EVIDENCE FROM CHANGES IN WIND PATTERNS**

Tatyana Deryugina, University of Illinois at Urbana-Champaign  
Co-Author(s): Garth Heutel, Georgia State University, Nolan Miller, University of Illinois at Urbana-Champaign, David Molitor, University of Illinois at Urbana-Champaign and Julian Reif, University of Illinois at Urbana-Champaign

**AIR POLLUTION AND PROCYCLICAL MORTALITY: CAUSAL EVIDENCE FROM THERMAL INVERSIONS**

Paulina Oliva, University of California, Santa Barbara  
Co-Author(s): Daniel Hicks, University of Oklahoma and Patrick Marsh, NOAA/NWS/NCEP Storm Prediction Center

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09:00 - 10:30

**AGRICULTURE I**

Room Peak 3

Chairperson: Jeremy Weber, University of Pittsburgh

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**AN ANALYSIS OF CLIMATE IMPACTS ON HERBICIDE, INSECTICIDE, AND FUNGICIDE EXPENDITURES: A FORWARD LOOKING ANALYSIS**

Lauren Rhodes, Texas A&M University  
Co-Author(s): Bruce A. McCarl, Texas A&M University

**COST-BENEFIT ANALYSIS OF CONTROLLING PHOSPHORUS EMISSION FROM AGRICULTURAL FIELDS: A DYNAMIC APPROACH**

Shaohui Tang, The Ohio State University  
Co-Author(s): Brent Sohngen, The Ohio State University

**ESTIMATION OF SPILLOVER EFFECTS FROM LARGE SCALE ADOPTION OF BT CORN IN THE PHILIPPINES**

Lawson Connor, North Carolina State University  
Co-Author(s): Zachary Brown, North Carolina State University, Roderick Rejesus, North Carolina State University and Jose Yorobe, University of the Philippines Los Banos

**DOES FEDERAL CROP INSURANCE INCREASE ENVIRONMENTAL EXTERNALITIES FROM AGRICULTURE?**

Jeremy Weber, University of Pittsburgh  
Co-Author(s): Nigel Key, USDA ERS and Erik O'Donoghue, USDA ERS

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09:00 - 10:30

**SPONSORED SESSION 3 - BEHAVIORAL ECONOMICS: HOUSING AND ENERGY**

Room Coppertop II

Chairperson: Stephan Kroll, Colorado State University

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**THE ADAPTATION OF THE US RESIDENTIAL SECTOR TO GLOBAL WARMING**

Matthieu Glachant, MINES ParisTech

Co-Author(s): François Cohen, London School of Economics and Magnus Söderberg, University of Gothenburg

Discussant: Nicholas Flores, University of Colorado Boulder

**THE PERSISTENCE OF MORAL SUASION ON ENERGY USE**

Michael Price, Georgia State University

Co-Author(s): Alec Brandon, University of Chicago, Paul Ferraro, Johns Hopkins University, John List, University of Chicago, Robert Metcalfe, University of Chicago and Florian Rundhammer, Georgia State University

Discussant: James Meldrum, University of Colorado Boulder

**CARROT AND STICK: USING A REGRESSION KINK DESIGN TO IDENTIFY IMPACTS OF ENERGY FEEBATES**

Laura Grant, Claremont McKenna College

Discussant: Meredith Fowlie, University of California, Berkeley

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09:00 - 10:30

**WATER II**

Room Peak 10

Chairperson: John Rolfe, CQ University

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**(NOT SO) GENTLY DOWN THE STREAM: HEALTH AND RIVER POLLUTION IN INDONESIA**

Evan Plous, Columbia University

Co-Author(s): Teevrat Garg, University of California, San Diego and London School of Economics, Stuart Hamilton, Salisbury University, Jacob Hochard, East Carolina University and John Talbot, Eastern Shore Regional GIS Cooperative

**WATER QUALITY RESILIENCE IN TRANSBOUNDARY GAME**

Linda Fernandez, Virginia Commonwealth University

**BEHAVIORAL RESPONSE TO AGRICULTURAL COST SHARING AND IMPLICATIONS FOR WATER QUALITY IN THE CHESAPEAKE BAY**

Patrick Fleming, Franklin & Marshall College

Co-Author(s): Erik Lichtenberg, University of Maryland and David A. Newburn, University of Maryland

**RECONCILING COSTS OF IMPROVING AGRICULTURAL WATER MANAGEMENT: THE GREAT BARRIER REEF IN AUSTRALIA**

John Rolfe, CQ University

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10:45 - 12:15

**PARALLEL PAPERS SESSION 6**

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10:45 - 12:15

**AGRICULTURE II**

Room Peak 1

Chairperson: Frederik Noack, University of California, Santa Barbara

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**ASEAN AGRICULTURAL TOTAL FACTOR PRODUCTIVITY**

Lee Kottmeyer, University of Nebraska Lincoln  
Co-Author(s): Lilyan Fulginiti, University of Nebraska-Lincoln

**"PRODUCING LAND". TECHNOLOGICAL DIFFUSION, INSTITUTIONAL INNOVATION, AND PRICE EFFECTS DURING THE SOYBEAN BOOM IN BRAZIL.**

Gil DePaula, Yale University

**PERCEIVED, MEASURED, AND ESTIMATED SOIL FERTILITY: IMPLICATIONS FOR FARMER MANAGEMENT PRACTICES IN EAST AFRICA**

Julia Berazneva, Middlebury College  
Co-Author(s): David Guerena, One Acre Fund, Linden McBride, Cornell University and Megan Sheahan, Cornell University

**TECHNOLOGY ADOPTION AND CROP DIVERSITY**

Frederik Noack, University of California, Santa Barbara  
Co-Author(s): Ashley Larsen, University of California, Berkeley and Martin Quaas, University of Kiel

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10:45 - 12:15

**VALUATION: HEDONIC**

Room Peak 11

Chairperson: Brent Sohngen, The Ohio State University

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**THE IMPACT OF TIME-VARYING UNOBSERVABLES ON HEDONIC REGRESSION ESTIMATION: EVIDENCE FROM BROWNFIELD CLEANUP PROGRAM IN NEW YORK, NY.**

Olesya Savchenko, University of Illinois Urbana-Champaign  
Co-Author(s): John Braden, University of Illinois Urbana-Champaign and Taro Mieno, University of Nebraska-Lincoln

**THE IMPACT OF POLLUTION BURDEN ON MICRO-LEVEL RESIDENTIAL SORTING**

Cristina Connolly, California Polytechnic State University  
Co-Author(s): Mitchell Livy, California State University Fullerton

**DOES WETLAND QUALITY MATTER? A SEMI-PARAMETRIC HEDONIC STUDY IN FRANKLIN, OHIO**

Brent Sohngen, The Ohio State University  
Co-Author(s): Yingdan Mei, The Ohio State University

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10:45 - 12:15

**WATER III**

Room Peaks 6,7,8

Chairperson: Charles Howe, University of Colorado Boulder

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**PRICE EFFICIENCY IN U.S. WATER RIGHTS MARKETS**

Renata Rimsaite, Pennsylvania State University  
Co-Author(s): Karen Fisher-Vanden, Pennsylvania State University and Sheila Olmstead, University of Texas at Austin

**DEMAND FOR INCREASED WATER RELIABILITY AMONG URBAN HOUSEHOLDS IN JORDAN**

Jennifer Orgill, Duke University  
Co-Author(s): Marc Jeuland, Duke University

**DROUGHTS AND SURFACE WATER SALES: AN INVESTIGATION OF SPATIAL DATA ON RICE FARMS IN CALIFORNIA**

Anita Chaudhry, California State University, Chico  
Co-Author(s): Dean Fairbanks, California State University, Chico

**GETTING WESTERN WATER PRICES RIGHT: CORRECTLY REFLECTING THE SCARCITY VALUE OF RAW WATER**

Charles Howe, University of Colorado Boulder  
Co-Author(s): Peter Nichols, Berg Hill Greenleaf Ruscitti LLP

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10:45 - 12:15

**ELECTRICITY IV**

Room Peak 12

Chairperson: Dallas Burtraw, Resources for the Future

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**ON THE INTERACTION OF RATE-BASED POLICY OPTIONS AND ELECTRICITY STORAGE CAPACITY UNDER THE CLEAN POWER PLAN**

Maxwell Brown, Colorado School of Mines  
Co-Author(s): Jared Carbone, Colorado School of Mines

**TRADE-OFFS IN TRADE: EXAMINING REGIONAL COST AND EMISSIONS OUTCOMES UNDER ALTERNATIVE CLEAN POWER PLAN COMPLIANCE SCENARIOS**

David Bielen, National Renewable Energy Laboratory

**CARBON-POLICY INTERACTIONS IN CALIFORNIA AND THE COMPETITIVE SELECTION OF RENEWABLE GENERATION TECHNOLOGIES**

Ed Balistreri, Colorado School of Mines  
Co-Author(s): Fadli Rahman, Colorado School of Mines

**EMISSIONS ALLOCATION DESIGN TO AVOID LEAKAGE UNDER THE CLEAN POWER PLAN**

Dallas Burtraw, Resources for the Future  
Co-Author(s): Karen Palmer, Resources for the Future, Anthony Paul, Resources for the Future and Hang Yin, Resources for the Future

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10:45 - 12:15

**TRADE**

Room Coppertop III

Chairperson: Carol McAusland, University of British Columbia

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**GARBAGE IN AND GARBAGE OUT? ON WASTE HAVENS IN SWITZERLAND**

Tobias Erhardt, University of Basel

**SULFUR DIOXIDE REGULATION, EMISSIONS LEAKAGE AND U.S. COAL EXPORTS**

Ron Chan, University of Manchester

**GLOBAL TRADE AND RISK SHARING IN A SPATIALLY CORRELATED CLIMATE**

Kyle Meng, University of California, Santa Barbara

Co-Author(s): Solomon Hsiang, University of California, Berkeley and  
Jonathan Dingel, University of Chicago

**CARBON REROUTING**

Carol McAusland, University of British Columbia

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10:45 - 12:15

**FORESTRY: MANAGEMENT**

Room Peak 10

Chairperson: Andrew Plantinga, University of California, Santa  
Barbara

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**ADAPTATION TO CLIMATE CHANGE IN FORESTRY - AN EMPIRICAL  
ANALYSIS OF HARVEST AND REPLANTING DECISIONS UNDER  
CLIMATE CHANGE IN THE WESTERN U.S.**

Yukiko Hashida, Oregon State University

Co-Author(s): David Lewis, Oregon State University

**THE OPTIMAL CONTROL OF WILDFIRES IN COMPLEX LANDSCAPES**

James Goodenberger, The Ohio State University

**COLONIAL ORIGINS AND FORESTLAND OUTCOMES - THE IMPACT  
OF INSTITUTIONS ON FORESTS AND TIMBER**

Chris Goodwin, University of California, Santa Barbara

**SALIENCE OF WILDFIRE RISK AND PUBLIC LAND MANAGEMENT**

Andrew Plantinga, University of California, Santa Barbara

Co-Author(s): Sarah Anderson, University of California, Santa Barbara,

Heather Hodges, University of California, Santa Barbara and Matthew

Wibbenmeyer, University of California, Santa Barbara

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10:45 - 12:15

**SPONSORED SESSION 4 - BEHAVIORAL ECONOMICS:  
WATER AND ENERGY**

Room Coppertop II

Chairperson: David Chapman, USDA Forest Service

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**THE MICRO-BEHAVIORAL ECONOMICS OF TECHNOLOGY ADOPTION  
FOR WATER CONSERVATION AND CLIMATE CHANGE ADAPTATION:  
ENGINEERS VS BEHAVIORAL SCIENTISTS**

Paul Ferraro, Johns Hopkins University

Co-Author(s): Francisco Alpizar, Centro Agronómico Tropical de

Investigación y Enseñanza and Maria Bernedo, Georgia State University

Discussant: Stephan Kroll, Colorado State University

**CONSERVATION SPILLOVERS AND BEHAVIORAL INTERVENTIONS:  
EXPERIMENTAL EVIDENCE FROM WATER AND ENERGY USE**

Katrina Jessoe, University of California, Davis

Co-Author(s): Gabriel Lade, Iowa State University, Frank Loge, University

of California, Davis and Edward Spang, University of California, Davis

Discussant: Casey Wichman, Resources for the Future

**MOTIVATIONS FOR WATER CONSERVATION FROM BEHAVIORAL  
INTERVENTIONS**

Daniel Brent, Louisiana State University

Co-Author(s): Joseph Cook, University of Washington, Corey Lott,

University of California, Santa Barbara, Kimberly Rollins, University of

Nevada, Reno, Shawn Stoddard, Truckee Meadows Water Authority and  
Michael Taylor, University of Nevada, Reno  
Discussant: David Chapman, USDA Forest Service

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10:45 - 12:15

**CLIMATE CHANGE: WEATHER III**

Room Peak 3

Chairperson: Nathan Hendricks, Kansas State University

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**CLIMATE CHANGE AND AGRICULTURE: THE ROLE OF TILE DRAINAGE**

Kevin Meyer, Iowa State University  
Co-Author(s): David Keiser, Iowa State University

**THE ROLE OF CROP INSURANCE PROGRAMS IN CLIMATE CHANGE IMPACT MEASUREMENT: A 2SLS ESTIMATION**

Zhangliang Chen, University of Illinois Urbana-Champaign  
Co-Author(s): Sandy Dall'Erba, University of Illinois Urbana-Champaign

**HOW DO HEAT WAVES, COLD WAVES, DROUGHTS, HAIL AND TORNADOES AFFECT US AGRICULTURE?**

Emanuele Massetti, Georgia Institute of Technology  
Co-Author(s): Robert Mendelsohn, Yale University

**THE ECONOMIC EFFECTS OF HEAT AND WATER STRESS IN AGRICULTURE**

Nathan Hendricks, Kansas State University

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10:45 - 12:15

**TRANSPORTATION II**

Room Peak 9

Chairperson: J.R. DeShazo, University of California Los Angeles

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**PROVIDING THE SPARK: IMPACT OF FINANCIAL INCENTIVES ON BATTERY ELECTRIC VEHICLE ADOPTION**

Bentley Clinton, University of Colorado Boulder  
Co-Author(s): Daniel Steinberg, National Renewable Energy Laboratory

**PUBLIC TRANSIT AND PROPERTY VALUES: DID THE METRO BLUE LINE AFFECT HOME PRICES IN MINNEAPOLIS?**

Sarah West, Macalester College  
Co-Author(s): Clemens Pilgram, Macalester College

**FUEL COSTS, ECONOMIC ACTIVITY, AND THE REBOUND EFFECT FOR HEAVY-DUTY TRUCKS**

William Raich, Resources for the Future  
Co-Author(s): Benjamin Leard, Resources for the Future, Joshua Linn, Resources For the Future and Virginia McConnell, Resources For the Future

**HOW DOES THE PRESENCE OF HOV LANES AFFECT PLUG-IN ELECTRIC VEHICLE ADOPTION IN CALIFORNIA? A GENERALIZED PROPENSITY SCORE APPROACH**

J.R. DeShazo, University of California Los Angeles  
Co-Author(s): Tamara Sheldon, University of South Carolina

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10:45 - 12:15

**VALUATION: ECOSYSTEMS**

Chairperson: Jacob Hochard, East Carolina University

Room Peak 2

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**THE WEALTH OF ECOSYSTEMS: VALUING NATURAL CAPITAL IN THE CONTEXT OF ECOSYSTEM BASED MANAGEMENT**

Seong Do Yun, Yale University

Co-Author(s): Joshua K. Abbott, Arizona State University, Eli P. Fenichel, Yale University and Barbara Hutniczak, National Oceanic and Atmospheric Administration (NOAA)

**ANGLER BEHAVIOR AND THE WELFARE EFFECTS OF STREAM RESTORATIONS**

Michele Baggio, University of Connecticut

Co-Author(s): Charles Towe, University of Connecticut

**ECONOMIC VALUATION OF RESTORATION ACTIONS FOR SALMON AND FORESTS AND ASSOCIATED WILDLIFE IN AND ALONG THE ELWHA RIVER**

Colleen Donovan, ABT Environmental Research

Co-Author(s): Richard Bishop, Professor Emeritus from the University of Wisconsin, James Boyd, Resources for the Future, Adam Domanski, National Oceanic and Atmospheric Administration, John Duffield, University of Montana, Peter Edwards, National Oceanic and Atmospheric Administration, Heather Hosterman, ABT Environmental Research, Barbara Kanninen, BK Econometrics, LLP, John Loomis, Colorado State University, Jason Murray, National Oceanic and Atmospheric Administration, Giselle Samonte, National Oceanic and Atmospheric Administration and Roger Tourangeau, Westat

**STORM PROTECTION SERVICES OF MANGROVE FORESTS**

Jacob Hochard, East Carolina University

Co-Author(s): Edward Barbier, University of Wyoming and Stuart Hamilton, Salisbury University

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12:30 - 01:15

**LUNCH**

Room Peaks 4,5

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01:00 - 01:45

**AERE AWARDS PROGRAM**

Room Peaks 4,5

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01:45 - 02:30

**KEYNOTE ADDRESS**

Catherine Wolfram, University of California, Berkeley  
*Effective Carbon Mitigation Strategies*

Room Peaks 4,5

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02:45 - 04:15

**PARALLEL PAPERS SESSION 7**

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02:45 - 04:15

**BEHAVIORAL ECONOMICS**

Chairperson: Severin Borenstein, University of California, Berkeley

Room Coppertop II

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**DO EXTRINSIC INCENTIVES UNDERMINE SOCIAL NORMS?  
EVIDENCE FROM A FIELD EXPERIMENT IN ENERGY  
CONSERVATION**

Gonzalo Sanchez, Escuela Superior Politecnica del Litoral  
Co-Author(s): Jose Pellerano, Universidad Iberoamericana, Michael Price,  
Georgia State University and Steven Puller, Texas A&M University

**THE EFFECT OF CONSERVATION MESSAGING ON URBAN  
RESIDENTIAL WATER DEMAND: AN EVENT STUDY USING HOURLY  
METER DATA FROM SAN FRANCISCO**

Dina Gorenshteyn, University of California, Berkeley

**BEHAVIORAL NUDGES IN NUTRIENT MANAGEMENT DECISIONS:  
ARE THEY "ONE-SIZE-FITS-ALL"?**

Wendong Zhang, Iowa State University

**NUDGING WITH TIME: HOW MUCH DOES STANDARDIZING TIME  
CHANGE BEHAVIOR?**

Severin Borenstein, University of California, Berkeley

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02:45 - 04:15

**VALUATION: PROPERTY VALUE III**

Room Peaks 6,7,8

Chairperson: Allen Klaiber, The Ohio State University

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**A VALUATION OF URBAN STREAM RESTORATIONS**

Charles Towe, University of Connecticut  
Co-Author(s): H. Allen Klaiber, The Ohio State University and Joe Maher,  
National Socio-Environmental Synthesis Center

**DO HOUSING VALUES RESPOND TO UNDERGROUND STORAGE  
TANK RELEASES? EVIDENCE FROM HIGH-PROFILE CASES ACROSS  
THE UNITED STATES**

Dennis Guignet, US Environmental Protection Agency  
Co-Author(s): Robin Jenkins, US Environmental Protection Agency,  
Matthew Ranson, Abt Associates Inc. and Patrick Walsh, US Environmental  
Protection Agency

**QUESTIONING THE DISTANCE-ONLY PARADIGM: OPTIMIZED  
QUANTITY-WITHIN-DISTANCE MODELS OF SPATIAL WELFARE  
HETEROGENEITY**

Robert Johnston, Clark University  
Co-Author(s): Benedict Holland, Clark University

**BLUE-GREEN ALGAE'S IMPACT ON OHIO'S INLAND LAKE HOUSING  
MARKETS**

Allen Klaiber, The Ohio State University  
Co-Author(s): David Wolf, The Ohio State University

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02:45 - 04:15

**ENERGY EFFICIENCY II**

Room Peak 12

Chairperson: Ian Lange, Colorado School of Mines

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**ENERGY SAVINGS FROM RESIDENTIAL BUILDING CODES:  
EVIDENCE FROM SMART-METER DATA**

Tianxia Zhou, University of California, Davis  
Co-Author(s): Kevin Novan, University of California, Davis and Aaron Smith,  
University of California, Davis

**DO ENERGY RETROFITS WORK? EVIDENCE FROM COMMERCIAL  
AND RESIDENTIAL BUILDINGS IN PHOENIX**

Yueming Qiu, Arizona State University  
Co-Author(s): Jing Liang, Arizona State University

**DO ENERGY EFFICIENCY INVESTMENTS DELIVER AT THE RIGHT  
TIME?**

Judson Boomhower, Stanford University  
Co-Author(s): Lucas Davis, University of California, Berkeley

**THE SUPPLY-SIDE EFFECTS OF ENERGY EFFICIENCY LABELS**

Ian Lange, Colorado School of Mines  
Co-Author(s): David Comerford, University of Stirling and Mirko Moro,  
University of Stirling

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02:45 - 04:15

**DEVELOPING COUNTRIES II**

Room Peak 3

Chairperson: Kelly Jones, Colorado State University

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**THE OPPORTUNITY COST OF FOREST PRESERVATION IN TERMS OF  
AGRICULTURAL ACTIVITY FORGONE IN THE BRAZILIAN AMAZON**

Felipe de Figueiredo Silva, University of Nebraska-Lincoln  
Co-Author(s): Lilyan Fulginiti, University of Nebraska-Lincoln and Richard  
Perrin, University of Nebraska-Lincoln

**DETERMINANTS OF AMAZON DEFORESTATION: THE ROLE OF OFF-  
FARM INCOME**

Jose Feres, Institute for Applied Economics Research (IPEA)  
Co-Author(s): Claudio Araujo, CERDI/Universite d'Auvergne and Jean-  
Louis Combes, CERDI/Universite d'Auvergne

**INDIA'S GREENHOUSE GAS ABATEMENT POLICIES - CONSIDERING  
THE CASE FOR MARKET BASED INSTRUMENTS**

Ashish Tyagi, Pennsylvania State University

**GENERATING EVIDENCE ON THE IMPACT OF HYBRID PUBLIC-  
PRIVATE CONSERVATION APPROACHES IN ECUADOR: DO FOREST  
ECONOMIC INCENTIVES INCREASE PROTECTED AREA  
EFFECTIVENESS?**

Kelly Jones, Colorado State University

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02:45 - 04:15

**INTERTEMPORAL DYNAMICS**

Room Peak 9

Chairperson: Ashley Langer, University of Arizona

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**THE REPRESENTATIVE AGENT MUST DIE: USING DEMOGRAPHICS  
TO INFORM SOCIAL DISCOUNT RATES**

Ethan Addicott, Yale University  
Co-Author(s): Eli Fenichel, Yale School of Forestry & Environmental  
Studies and Matthew Kotchen, Yale University



**REPUTATION-INDUCED HYSTERESIS AND DYNAMIC ENVIRONMENTAL REGULATION**

Beat Hintermann, University of Basel  
Co-Author(s): Andreas Lange, University of Hamburg

**CLIMATE CHANGE AND LONG-RUN DISCOUNT RATES: EVIDENCE FROM REAL ESTATE**

Andreas Weber, New York University  
Co-Author(s): Stefano Giglio, University of Chicago, Matteo Maggiori, Harvard University and Johannes Stroebel, New York University

**DYNAMIC TECHNOLOGY SUBSIDIES**

Ashley Langer, University of Arizona  
Co-Author(s): Derek Lemoine, University of Arizona

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02:45 - 04:15

**NATURAL DISASTERS**

Room Peak 10

Chairperson: Daniel Osberghaus, Centre for European Economic Research

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**MEASURING THE FINANCIAL SHOCKS OF NATURAL DISASTERS: A PANEL STUDY OF US STATES**

Qing Miao, Arizona State University  
Co-Author(s): Michael Abrigo, University of Hawaii and Hou Yilin, Syracuse University

**SEA LEVEL RISE, FLOOD RISK, AND PROPERTY VALUES: EVIDENCE FROM NEW YORK CITY**

Jamie Mullins, University of Massachusetts Amherst  
Co-Author(s): Matthew Gibson, Williams College and Alison Hill, Williams College

**THE EFFECT OF FEDERAL DISASTER ASSISTANCE ON HOUSEHOLD FINANCE AND BUSINESS SURVIVAL AFTER A NATURAL DISASTER**

Justin Gallagher, Case Western Reserve University  
Co-Author(s): Daniel Hartley, Chicago Federal Reserve Bank

**THE DEMAND FOR INDEX-BASED FLOOD INSURANCE IN A HIGHLY DEVELOPED COUNTRY**

Daniel Osberghaus, Centre for European Economic Research  
Co-Author(s): Martin Achtnicht, Leibniz Institute of Ecological Urban and Regional Development

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02:45 - 04:15

**CLIMATE POLICY: TECHNICAL CHANGE**

Room Peak 2

Chairperson: Derek Lemoine, University of Arizona

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**OPTIMAL EXPERIMENTATION WITH SOLAR GEOENGINEERING**

David Kelly, University of Miami  
Co-Author(s): Garth Heutel, Georgia State University, Juan Moreno-Cruz, Georgia Tech University and Soheil Shayegh, Stanford University

**SHARING R&D INVESTMENTS IN BREAKTHROUGH TECHNOLOGIES  
TO CONTROL CLIMATE CHANGE**

Santiago Rubio, University of Valencia

**ENERGY TRANSITIONS: DIRECTED TECHNICAL CHANGE MEETS  
DIRECTED EXTRACTION**

Derek Lemoine, University of Arizona

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02:45 - 04:15

**AIR POLLUTION III**

Room Peak 11

Chairperson: Nicolai Kuminoff, Arizona State University

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**THE EFFECTS OF AIR POLLUTION ON EDUCATION AND HUMAN  
CAPITAL: EVIDENCE FROM CHINESE CITIES**

Niall Williams, Connecticut College

Co-Author(s): Wei Zhang, Connecticut College

**CANARY IN A COAL MINE: IMPACT OF MID-20TH CENTURY AIR  
POLLUTION ON INFANT MORTALITY AND PROPERTY VALUES**

Edson Severnini, Carnegie Mellon University

Co-Author(s): Karen Clay, Carnegie Mellon University and Joshua Lewis,  
University of Montreal

**THE (NON)SEPARABILITY OF AIR QUALITY: EVIDENCE FROM  
MILLIONS OF HOUSEHOLDS ACROSS THE UNITED STATES**

Christos Makridis, Stanford University

**HAZED AND CONFUSED: AIR POLLUTION, COGNITIVE  
FUNCTIONING, AND FINANCIAL DECISION MAKING AMONG THE  
ELDERLY**

Nicolai Kuminoff, Arizona State University

Co-Author(s): Kelly Bishop, Arizona State University, Jonathan Ketcham,  
Arizona State University and Christopher Powers, U.S. Centers for  
Medicare and Medicaid Services

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02:45 - 04:15

**TRANSPORTATION III**

Room Coppertop III

Chairperson: Gloria Helfand, U.S. Environmental Protection  
Agency

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**FUEL ECONOMY STANDARDS, ATTRIBUTE-BASING, AND FUEL  
PRICE UNCERTAINTY**

Ryan Kellogg, University of Michigan

**FUEL PRICES, NEW VEHICLE FUEL ECONOMY, AND IMPLICATIONS  
FOR ATTRIBUTE-BASED STANDARDS**

Benjamin Leard, Resources for the Future

Co-Author(s): Joshua Linn, Resources for the Future

**OVERLAPPING STRATEGIES FOR REDUCING CARBON EMISSIONS  
FROM THE PERSONAL TRANSPORTATION SECTOR**

Soren Anderson, Michigan State University

Co-Author(s): Carolyn Fischer, Resources for the Future

**EXAMINING THE AFFORDABILITY IMPACTS OF LIGHT-DUTY  
VEHICLE GREENHOUSE GAS EMISSION STANDARDS**

Gloria Helfand, U.S. Environmental Protection Agency

Co-Author(s): Geoffrey Burmeister, University of Michigan and Alecia  
Cassidy, University of Michigan

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02:45 - 04:15

**WATER IV**

Room Peak 1

Chairperson: Casey Wichman, Resources for the Future

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**IMPLICATION OF WELL CAPACITY FOR INTRA-SEASONAL VALUE OF  
AQUIFER MANAGEMENT**

Mani Rouhi Rad, University of Illinois at Urbana-Champaign

Co-Author(s): Nicholas Brozovic, University of Nebraska-Lincoln

**GROWING INTO WATER CONSERVATION? DECOMPOSING THE  
DRIVERS OF REDUCED WATER CONSUMPTION IN LAS VEGAS, NV**

Christa Brelsford, Santa Fe Institute

Co-Author(s): Joshua Abbott, Arizona State University

**SUBSIDIES FOR SUCCULENTS: THE WELFARE IMPACTS OF LAS  
VEGAS' CASH-FOR-GRASS REBATE PROGRAM**

Jonathan Baker, Harvard University

**ENDURING EFFECTS OF CHANGES IN BILLING FREQUENCY:  
EVIDENCE FROM URBAN WATER USE**

Casey Wichman, Resources for the Future