Program Overview

Monday (August 24th, 2015); Altgebäude, Pockelsstraße 4		
Tutorial Day	**07:30–20:30**	Registration
	08:30–09:45	Tutorial 1: *Introduction into Benchmarking with DEA*, Rajiv Banker, Temple University, USA
	09:45–10:00	Coffee Break
	10:00–11:15	Tutorial 2: *Benchmarking in Manufacturing* Konstantinos Triantis, Virginia Tech University, USA
	11:15–11:30	Coffee Break
	11:30–12:45	Tutorial 3: *Benchmarking Software: PIM-DEA* Ali Emrouznejad, Aston Business School, UK
	12:45–14:00	Lunch
	14:00–15:15	Tutorial 4: *DEA and Regulation* Finn Førsund, University of Oslo, Norway
	15:15–15:30	Coffee Break
	15:30–16:45	Tutorial 5: *Value Judgments in DEA* Victor Podinovski, Loughborough University, UK
	16:45–17:00	Coffee Break
	17:00–18:15	Tutorial 6: *Selection of Inputs and Outputs in DEA* Subhash Ray, University of Connecticut, USA
	18:30–21:00	Welcome Reception
Tuesday (August 25th, 2015); Altgebäude, Pockelsstraße 4		
Full Day Conference	**08:00–18:00**	Registration
	09:00–10:00	Opening Ceremony (Haus der Wissenschaft)
	10:00–10:45	Coffee Break
	10:45–12:15	Session 1 (7 parallel venues)
	12:15–13:45	Lunch
	13:45–15:15	Session 2 (7 parallel venues)
	15:15–15:45	Coffee Break
	15:45–17:15	Session 3 (7 parallel venues)
	18:30–24:00	Gala Dinner incl. William W. Cooper Award (Altstadtrathaus)

Program Overview

Wednesday (August 26th, 2015); Altgebäude, Pockelsstraße 4		
Half Day Conference & Social Program	**08:00–11:30**	Registration
	09:00–09:45	Keynote 1: *Decision-based Production Theory and DEA* Harald Dyckhoff, RWTH Aachen University, Germany
	09:45–10:30	Keynote 2: *Caveat Emptor: Bootstrap-based Tests of Contextual Variables in DEA* Rajiv Banker, Temple University, USA
	10:30–11:00	Coffee Break
	11:00–12:00	Bus Transfer to Volkswagen AG, Wolfsburg
	12:00–17:30	Autostadt & Volkswagen Factory Tour, Wolfsburg
	17:30–20:00	Train Transfer back to Braunschweig
	20:00–23:00	Optional Get Together (“Sonnendeck” Rooftop Bar)
Thursday (August 27th, 2015); Altgebäude, Pockelsstraße 4		
Full Day Conference	**08:00–11:30**	Registration
	09:00–10:30	Session 4 (7 parallel venues)
	10:30–11:00	Coffee Break
	11:00–12:30	Panel Discussion: *DEA in Regulation*
	12:30–13:30	Lunch
	13:30–15:00	Session 5 (7 parallel venues)
	15:00–15:30	Coffee Break
	15:30–16:45	Panel Discussion: *Past-Present-Future of DEA*
	16:45–17:00	Farewell
	18:30–20:00	Braunschweig Guided Tour
Friday (August 28th, 2015); Goslar		
Optional Tour	**10:00–11:00**	Bus Transfer to Goslar
	11:00–17:00	Visiting Rammelsberg Mine and Goslar Old Town
	17:00–18:00	Bus Transfer back to TU Braunschweig

Detailed Schedule of Presentations

Session 1

Tuesday 25th August, 2015

10:45–12:15

Detailed Schedule of Presentations

Energy and Regulation; Chair: Per Agrell		
Session 1: 10:45–12:15 **Parallel Venue 1: SN 19.2**	Title: Paper-ID: Authors:	Performance Evaluation of Urban Water Supply Utilities in China P039 Minzhe Du, Bing Wang
	Title: Paper-ID: Authors:	Measuring Environmental Efficiencies of the 29 Chinese Provinces: Application of Three-stage DEA P221 Hailing Zhao
	Title: Paper-ID: Authors:	Slacks-based Inefficiency Evaluation for China's Regional Industrial System with Undesirable Output Using a Network DEA Model P060 Yanminshao
	Title: Paper-ID: Authors:	Incentive Regulation with Flawed Cost Models: Firm Behaviour and Productivity Losses P217 Per Agrell, Emili Grifell-Tatje
Theory and Modeling; Chair: Mehdi Toloo		
Session 1: 10:45–12:15 **Parallel Venue 2: SN 19.7**	Title: Paper-ID: Authors:	Fuzzy Multi-Period Efficiency Measurement with Weight Restrictions P040 Shiang-Tai Liu
	Title: Paper-ID: Authors:	Two Different Approaches to Stochastic DEA P031 Ole Bent Olesen, Niels Christian Petersen
	Title: Paper-ID: Authors:	Selecting Best Supplier by Advanced Cross-Efficiency (ACE) P021 Elham Rostamiyan, Franck Komi Adjogble, Vatani Behdad
	Title: Paper-ID: Authors:	A Bio-Objective Data Envelopment Analysis Model Using a Common Set of Weights P139 Adel Hatami-Marbini, Mehdi Toloo

Detailed Schedule of Presentations

Banking and Finance; Chair: Ibrahim H. Osman		
Session 1: 10:45–12:15 **Parallel Venue 3: PK 4.1**	Title: Paper-ID: Authors:	A New Ranking Method Based on Marginal Efficiency Contribution: An Empirical Analysis of Chinese Commercial Banks P015 Ning Zhu, Jens Leth Hougaard, Bing Wang, Zhiqian Yu
	Title: Paper-ID: Authors:	Technical Efficiency of the Global Systemically Important Financial Institutions (SIFI) P109 Irina Ipatova, Henry Penikas, Victoria Sapozhnikova
	Title: Paper-ID: Authors:	X-Efficiency of Indian Commercial Banks and Their Determinants of Service Quality: A Study of Post Global Financial Crisis P112 Gagandeep Sharma, Divya Sharma
	Title: Paper-ID: Authors:	The Lebanese Banking Sector: A Combined Data Envelopment and Granger Causality Analysis for Predicting a Bank Failure and Assessing Mergers and Acquisitions P284 Ibrahim H. Osman, Baydaa Al-Ayoub, Abdel Latef Anouze

Detailed Schedule of Presentations

Health; Chair: Jon Chilingerian		
Session 1: 10:45–12:15 **Parallel Venue 4: SN 19.3**	Title: Paper-ID: Authors:	Evaluation of Determinants of Health System Efficiency for OECD Countries Using Bayesian Stochastic Frontier Analysis and Bayesian Beta Regression P187 Mehmet Ali Cengiz, Emre Dünder, Erol Terzi, Serpil Gumustekin
	Title: Paper-ID: Authors:	Trade-Off Between Hospital Technical Efficiency and Health Care Quality: Nonparametric Conditional Methodology P065 Yauheniya Varabyova, Rudolf Blankart, Jonas Schreyögg
	Title: Paper-ID: Authors:	Assessing Performance of Health Stations in Hualien County, Eastern Taiwan Using Data Envelopment Analysis and Balanced Scorecard Approach P096 Shu Chen Liu, Shinn Sun, Shing Chen Hu
	Title: Paper-ID: Authors:	Does Success Lead to More Success? An Examination of Individual Surgeon Performance Across Multiple Hospitals Using DEA P064 Andrew Wilson, Jon Chilingerian
Transportation; Chair: Alessio Ishizaka		
Session 1: 10:45–12:15 **Parallel Venue 5: SN 19.4**	Title: Paper-ID: Authors:	Impact of Privatization of Ports on Relative Efficiency of Major Ports of India P199 Mrinal Dasgupta, Deepankar Sinha
	Title: Paper-ID: Authors:	Benchmarking Alternative Fuel Vehicle Using DEA: Outlier Analysis with Policy Recommendation P053 David Gray, Amar Nayak, Emrouznejad Ali
	Title: Paper-ID: Authors:	Evaluation on the Efficiency of Logistics Industry in Wuhan City Circle P250 Shu Liu, Lei Chen
	Title: Paper-ID: Authors:	Fair Centralized Allocation of Resource Limitations Among Processes P120 Sebastian Ihrig, Claus Brech, Thomas Fliedner, Alessio Ishizaka

Detailed Schedule of Presentations

Agriculture; Chair: Giannis Karagiannis		
Session 1: 10:45–12:15 **Parallel Venue 6: Neuer Senatssaal**	Title: Paper-ID: Authors:	Total Factor Productivity Change and Inovation in Farms Producing Paddy in Barfa District of Samsun, Turkey P017 Selime Canan, Vedat Ceyhan
	Title: Paper-ID: Authors:	Technical Efficiency and Potential Productivity Gains of Cereal Farms in Iran P024 Mohammad Ali Nasseri Jahromi, Erfaneh Rasekh Jahromi, Jalil Kodaparast, Atthar Rasekh Jahromi, Reza Nasseri Jahromi
	Title: Paper-ID: Authors:	Total Factor Productivity Growth in the U.S. Agricultural Sector: Interstate Analysis Using “Bads” and “Goods” P057 Nataliya Plesha, Subhash Ray, Riichard Nehring, Eldon Ball
	Title: Paper-ID: Authors:	Efficiency Analysis of PGI Beans Farms in Greece P173 Giannis Karagiannis, Katerina Melfou
Other Applications; Chair: Emine Demet Mecit		
Session 1: 10:45–12:15 **Parallel Venue 7: PK 4.4**	Title: Paper-ID: Authors:	Stochastic Cost Efficiency of Supply Chain P267 Mostafa Korzaledin, Mahnaz Mirbolouki
	Title: Paper-ID: Authors:	Efficiency Measurement of Regional Development Agencies in Turkey P116 Alpagut Yavuz
	Title: Paper-ID: Authors:	Quality Efficiency of Scotch Single Malt Production - An Empirical Two-Model DEA Approach P023 Magnus Richter
	Title: Paper-ID: Authors:	An Evaluation of Efficiencies for Turkey’s Cities with Data Envelopment Analysis (DEA) in Terms of Cinemas: A Super Efficiency Application P047 Emine Demet Mecit, İhsan Alp

Session 2

Tuesday 25th August, 2015

13:45–15:15

Detailed Schedule of Presentations

Energy and Regulation; Chair: Luka Neralic		
Session 2: 13:45–15:15 **Parallel Venue 1: SN 19.2**	Title: Paper-ID: Authors:	Quality and Efficiency – A DEA-based Analysis of the Austrian Electricity Distribution Sector P066 Roland Görlich, Ulrich Rührnössl
	Title: Paper-ID: Authors:	Productivity Development among Norwegian Electricity Distribution Utilities – the Impact of Capital Assessment and Technological Progress P171 Roar Amundsveen, Hilde Marit Kvile, Thor Martin Neurater
	Title: Paper-ID: Authors:	Application of the StoNED Method in the Regulation of Electricity Distribution in Finland: The Regulator's Perspective 095 Matti Ilonen
	Title: Paper-ID: Authors:	Evaluation of the Relative Efficiency of Electricity Distribution Centers in Croatia Using DEA 097 Maja Mihelja Zaja, Rajiv D. Banker, Dubravko Hunjet, Luka Neralic, Richard E. Wendell, Ante Zaja

Detailed Schedule of Presentations

Theory and Modeling; Chair: Ihsan Alp		
Session 2: 13:45–15:15 **Parallel Venue 2: SN 19.7**	Title: Paper-ID: Authors:	An Alternative Methodology Based on Group Decision Making Technique to Analyse Questionnaire Data P052 Majid Zerafat Angiz L., Mozhgan Akbari Naghani, Rusdi Indra Zuhdi Murat, Mohamad Hashim Othman
	Title: Paper-ID: Authors:	An Economic Measure of Capacity Utilization in the Short Run under Constant Returns to Scale: A Nonparametric Analysis using DEA P051 Subhash Ray, Sangmok Kang
	Title: Paper-ID: Authors:	Sensitivity Analysis of Efficiency in Stochastic DEA Using Confidence Interval P061 Mahnaz Mirbolouki, Mohammad Hassan Behzadi, Mostafa Korzaledin
	Title: Paper-ID: Authors:	A Monte Carlo Study on the Efficiency Evaluation for Fixed and Variable Sized Hierarchical Decision Making Units P054 İhsan Alp
Banking and Finance; Chair: Nurhan Davutyan		
Session 2: 13:45–15:15 **Parallel Venue 3: PK 4.1**	Title: Paper-ID: Authors:	Efficiency Analysis of State Owned and Private Commercial Banks Operating in Bangladesh: A DEA Approach P140 Muhammad Amir Hossain
	Title: Paper-ID: Authors:	Efficiency and Productivity of Local Public Insurance Offices in Sweden P005 Christian Andersson, Jonas Thelander, Jonas Månsson
	Title: Paper-ID: Authors:	Bank Efficiency Prior and After the Financial Crisis: DEA Analysis of Swiss Cantonal Banks P251 Galia Kondova, Tobias Hummel, David Bobst
	Title: Paper-ID: Authors:	Measuring the 'Lost Return on the Dollar' for Turkish Banking P254 Nurhan Davutyan, Canan Yildirim

Health; Chair: Panagiotis Zervopoulos		
Session 2: 13:45–15:15 **Parallel Venue 4: SN 19.3**	Title: Paper-ID: Authors:	Cross-Efficiencies: Input vs Output based Effects – Using the DEA Approach for an Evaluation of European Health Systems P155 Andreas Dellnitz, Elmar Reucher
	Title: Paper-ID: Authors:	Efficiency Measurement of Health System OECD Countries Using Data Envelopment Analysis P152 Eda Kocak, Fazıl Gökgöz
	Title: Paper-ID: Authors:	Performance Assessment of Public Mental Hospitals in Taiwan: Application of DEA and BSC Approaches P111 Meei-Lian Tzeng, Shinn Sun
	Title: Paper-ID: Authors:	Incorporating Target Levels with Possibility of Noise in Performance Measurement: Evidence from Primary Health Care P100 Panagiotis Zervopoulos, Panagiotis Mitropoulos, Ioannis Mitropoulos
Education; Chair: Jill Johnes		
Session 2: 13:45–15:15 **Parallel Venue 5: SN 19.4**	Title: Paper-ID: Authors:	Efficiency in the Universities of Mexico 2008-2012: A Study through Dynamic-Network DEA Model P085 César L. Navarro-Chávez, Odette Delfin
	Title: Paper-ID: Authors:	Comparison of Countries According to Academic Performance Change over Time with Malmquist DEA Analysis P099 Ayhan Gölcükcü, Hasan Bal
	Title: Paper-ID: Authors:	Construction of Universities' Typology via DEA P253 Irina Abankina, Fuad Aleskerov, Veronika Belousova, Leonid Gokhberg, Kirill Zinkovsky, Sofya Kiselgof, Vsevolod Petrushchenko, Sergey Shvydun
	Title: Paper-ID: Authors:	Mergers in Higher Education: Assessing the Efficiency of Non-, Pre- and Post-mergers Higher Education Institutions in England 1996/97 to 2012/13 Using an Output Distance Function P206 Maria Papadimitriou, Jill Johnes

Detailed Schedule of Presentations

Agriculture; Chair: Vedat Ceyhan		
Session 2: 13:45–15:15 **Parallel Venue 6: Neuer Senatssaal**	Title: Paper-ID: Authors:	A Comparison between Malmquist and Multilateral Productivity Indexes: A Case of Japanese Rice Sector P073 Katsunobu Kondo, Jun Sasaki, Yasutaka Yamamoto
	Title: Paper-ID: Authors:	The Efficiency and Productivity of Agriculture Sector in Asian Countries: An Application of DEA and Malmquist Index P159 Muhammad Omer Chaudhry, James Odeck
	Title: Paper-ID: Authors:	An Efficiency Analysis of Brazilian Sugarcane Crop with Malmquist Index Approach P183 Terezinha Bezerra Albino Oliveira, Carlos Ernani Fries,Antonio Cezar Bornia, Mauro Wagner de Oliveira
	Title: Paper-ID: Authors:	Production Efficiency and its Determinants of Beekeepers in Turkey P038 Vedat Ceyhan, Murat Emir, Ahmet Güler
Other Applications; Chair: Clara Bento Vaz		
Session 2: 13:45–15:15 **Parallel Venue 7: PK 4.4**	Title: Paper-ID: Authors:	Efficiency of Municipal Governments in Slovakia P077 Miroslav Huzvar, Zuzana Rigova, Katarína Sýkorová
	Title: Paper-ID: Authors:	Fuzzy Multi-Criteria Decision Making Approaches for the Selection of Renewable Power Generation Technologies P102 Mehmet Emin Baysal
	Title: Paper-ID: Authors:	Research Productivity in Data Envelopment Analysis P086 Shinn Sun
	Title: Paper-ID: Authors:	An Application of DEA to the Third Sector: the Case of Children and Youth Households P107 Clara Bento Vaz, Ivo Mendes, Jorge Alves

Session 3

Tuesday 25th August, 2015

15:45–17:15

Detailed Schedule of Presentations

Energy and Regulation; Chair: Behrouz Arabi		
Session 3: 15:45–17:15 **Parallel Venue 1: SN 19.2**	Title: Paper-ID: Authors:	DEA-based MPI Analysis of Electricity Distribution Co-operatives in the Philippines P164 Trishit Bandyopadhyay, Fernando Roxas
	Title: Paper-ID: Authors:	Impact of DEA-based Incentive Regulation on Cost Reduction in Electric Utilities in Brazil P285 Rajiv Banker, Daqun Zhang
	Title: Paper-ID: Authors:	Performance Evaluation of Electricity Generated from Renewable Sources of Turkey and European Union Member States P191 Serpil Gumustekin, Talat Senel
	Title: Paper-ID: Authors:	Using DEA-MBP to Joint Environmental and Cost Efficiency Analysis in Electricity Generation P222 Foroogh Shadman, Behrouz Arabi, Khalid Abdul Rahim
Theory and Modeling; Chair: Yongjun Li		
Session 3: 15:45–17:15 **Parallel Venue 2: SN 19.7**	Title: Paper-ID: Authors:	On Relations of Different Sets of Units Used for Removing Anadequacies in the DEA Models P104 Vladimir E. Krivonozhko, Finn R. Førsund, Andrey V. Lychev
	Title: Paper-ID: Authors:	Modified AP Model for Ranking DMU by Finding a Direction with the Least Length Stage P115 Mehdi Kamari, Abbaas Ali Noura, Masoud Sanei, Ghasem Tohidi
	Title: Paper-ID: Authors:	A Two-stage Prediction Model for DEA Efficiency Scores P273 Abdullah Aldamak, Saeed Zolfaghari
	Title: Paper-ID: Authors:	A Robust Data Envelopment Analysis with Uncertain Data P226 Lizheng Wang, Yongjun Li, Luka Neralić, Liang Liang

Detailed Schedule of Presentations

Banking and Finance; Chair: Mette Asmild		
Session 3: 15:45–17:15 **Parallel Venue 3: PK 4.1**	Title: Paper-ID: Authors:	Efficiency and Productivity Change in Islamic and Conventional Banks: Evidence From the Gulf Cooperation Council Countries P205 Jill Johnes, Marwan Izzeldin, Vasileios Pappas
	Title: Paper-ID: Authors:	Diversification-consistent Data Envelopment Analysis in Finance P211 Martin Branda
	Title: Paper-ID: Authors:	The Different Approaches of Banking Efficiency: A Meta-analysis P215 Lucas Macoris, Alexandre Salgado Junior, Eduardo Falsarella Junior
	Title: Paper-ID: Authors:	Inefficiency Patterns amongst Different Types, and Generations, of Bangladeshi Banks P196 Mette Asmild, Dorte Kronborg, Kent Matthews
Health; Chair: Shinn Sun		
Session 3: 15:45–17:15 **Parallel Venue 4: SN 19.3**	Title: Paper-ID: Authors:	Measuring Efficiency of Sales Territories for Medical Devices in Brazil through Data Envelopment Analysis P123 Renato B. Da Cunha, Camilo José Poulsen-Bornia, Denise Lindstrom Bandeira
	Title: Paper-ID: Authors:	Intra- and Inter-group Composite Indicators Using the BoD Model P145 Roxani Karagiannis, Giannis Karagiannis
	Title: Paper-ID: Authors:	Hospital Efficiency with Endogenously Determined Direction Vectors P243 Murat Bilsel, Nurhan Davutyan
	Title: Paper-ID: Authors:	A Performance Study of Long-term Care Service Organizations in Hualien, Eastern Taiwan: Integrated Data Envelopment Analysis and Balanced Scorecard Approach P087 Hsiuling Lee, Shinn Sun

Detailed Schedule of Presentations

Education; Chair: Vincent Charles		
Session 3: 15:45–17:15 **Parallel Venue 5: SN 19.4**	Title: Paper-ID: Authors:	Measuring the Efficiency of National Education System: The Network DEA approach P128 Syarifa Hanoum, Sardar M.N Islam
	Title: Paper-ID: Authors:	Efficiency of Primary Education and its Determinants: An Investigation of Public, Private and Non-governmental Schools P240 Ahmad Nawaz, Bisma Jadoon
	Title: Paper-ID: Authors:	An Analysis of Efficiency of Learning-teaching Performance Using Data Envelopment Analysis P174 Necdet Osam, Solmaz Ghaffarianasl, Sahand Daneshvar
	Title: Paper-ID: Authors:	Efficiency-based Brand Equity of Business Schools P192 Vincent Charles
Agriculture; Chair: Joseph Allendorf		
Session 3: 15:45–17:15 **Parallel Venue 6: Neuer Senatssaal**	Title: Paper-ID: Authors:	A Coin Has Two Sides：Which one is Driving China's Green TFP Growth？ P028 Guangtian Liu, Bing Wang, Ning Zhang
	Title: Paper-ID: Authors:	Data Envelopment Analysis with Classification and Regression Tree – A Case of Technical Efficiency of Dairy Farms in Estonia P232 Helis Luik, Ants-Hannes Viira, Reet Poldaru, Jüri Roots, Rando Värnik
	Title: Paper-ID: Authors:	Measuring the Impact of Public Subsidies on Technical Efficiency: A Nonparametric Conditional Efficiency Approach P166 Minviel Jean Joseph, Kristof De Witte
	Title: Paper-ID: Authors:	Productivity Change in North-Rhine Westphalian Dairy Farming 2007-2014: An Application of the Malmquist Index P249 Joseph Allendorf

Detailed Schedule of Presentations

Theory and Modeling; Chair: Jesus T. Pastor		
Session 3: 15:45–17:15 **Parallel Venue 7: PK 4.4**	Title: Paper-ID: Authors:	Identifying Strong and Weak Congestion in the Presence of Negative Data: A DEA Approach P033 Robabeh Eslami, Mohammad Khoveyni
	Title: Paper-ID: Authors:	Efficiency Decomposition in a Two-Stage DEA Model with Stage 1 Output, Intermediate and Stage 2 Input Variables P009 Don Galagedera
	Title: Paper-ID: Authors:	Using Dynamic DEA to Evaluate the Effectiveness of Machine-building Enterprises of Ukraine P208 Leonid Galchinsky
	Title: Paper-ID: Authors:	Design and Implementation of a Shiny Interactive Web Application by RStudio for Estimating Data Envelopment Analysis Efficiency Measures P059 Juan Aparicio, Jesus T. Pastor, Lidia Ortiz, Vidal Jiménez Fernando, Javier Alcaraz, Juan F. Monge

Session 4

Thursday 27th August, 2015

09:00–10:30

Detailed Schedule of Presentations

Energy and Regulation; Chair: Tore Langset		
Session 4: 09:00–10:30 **Parallel Venue 1: SN 19.2**	Title: Paper-ID: Authors:	Understanding Malaysia's Water Industry Productivity Growth: Past, Present and Future P091 Kok Fong See
	Title: Paper-ID: Authors:	Environmental Performance Controlling for Carbon Leakage P230 Thomas Grebel, Michael Stützer
	Title: Paper-ID: Authors:	The Returns to Scale Assumption in Incentive Rate Regulation P258 Rajiv Banker, Daqun Zhang
	Title: Paper-ID: Authors:	Cross-subsidies or Economies of Scope – DEA as a Tool to Assess Cost Allocation and Productivity in Norwegian Electrical Utilities P170 Roar Amundsveen, Hilde Marit Kvile, Tore Langset
Theory and Modeling; Chair: Konstantinos Triantis		
Session 4: 09:00–10:30 **Parallel Venue 2: SN 19.7**	Title: Paper-ID: Authors:	On the Interpretation of Farrell Efficiency Measures and the Malmquist Productivity Index P260 Finn Førsund
	Title: Paper-ID: Authors:	Productive Efficiency Measures Using a System-of-equations Two-stage DEA Approach: the Case of Greek Public Hospitals P141 Roxani Karagiannis
	Title: Paper-ID: Authors:	Luenberger Productivity Indicator and its Decomposed Components in the Presence of a Change in the Direction of Measurement P188 Mohsen Afsharian, Heinz Ahn
	Title: Paper-ID: Authors:	The Implementation of a Complex Adaptive Systems Approach for Productive Efficiency Analysis P110 Konstantinos Triantis, Francis Dougherty, Nathan Ambler

Detailed Schedule of Presentations

Banking and Finance; Chair: Abdel-Latef Anouze		
Session 4: 09:00–10:30 **Parallel Venue 3: PK 4.1**	Title: Paper-ID: Authors:	A Three-stage DEA Model to Evaluate the Performance and Explore Preferred Targets for Bank Branches P276 Cong Xu, Jian-Bo Yang, Yu-Wang Chen, Hua-Ying Zhu
	Title: Paper-ID: Authors:	Technical and Scale Efficiency of Scheduled Banks of Bangladesh in terms of SME Finance Using Data Envelopment Analysis (DEA) P162 Shamim Ara, Hazera Akter
	Title: Paper-ID: Authors:	Interest Rate and Banks' Productivities P142 Shu-Chin Huang, Ching-Yi Chiang
	Title: Paper-ID: Authors:	Data Envelopment Analysis and Data Mining for Bank Performance: A Comparative Study P227 Abdel-Latef Anouze, Imad Bou-Hamad
Transportation; Chair: Subhash Ray		
Session 4: 09:00–10:30 **Parallel Venue 4: SN 19.3**	Title: Paper-ID: Authors:	Evaluation of Railway Traffic Control Efficiency and its Determinants P132 Bart Roets, Johan Christiaens
	Title: Paper-ID: Authors:	Assessing Performance of Czech Public Transport Companies with Two-stage DEA P252 Markéta Matulová
	Title: Paper-ID: Authors:	Economic Efficiency of Container Terminals of APEC Countries, 2000-2013: A Measurement with a Dynamic DEA Model P180 Odette Delfin, César L. Navarro-Chávez
	Title: Paper-ID: Authors:	Measurement of Non-Radial Efficiency using DEA: A Study of Passenger Bus Undertakings in India P079 Anand Venkatesh, Subhash Ray

Detailed Schedule of Presentations

Education; Chair: Hasan Bal		
Session 4: 09:00–10:30 **Parallel Venue 5: SN 19.4**	Title: Paper-ID: Authors:	The Performance of Brazilian Students on Standardized Tests of Large-scale Assessments: Administrative and Pedagogical Practices to Improve Educational Policies P213 Alexandre Pereira Salgado Junior, Juliana Chiaretti Novi
	Title: Paper-ID: Authors:	Network DEA for Measuring Efficiency of National Education System P275 Syarifa Hanoum, Sardar M.N. Islam
	Title: Paper-ID: Authors:	The Efficiency of Tunisian Students' Achievement: A Smooth Bootstrap Data Envelopment Analysis with Non-discretionary Inputs P245 Hédi Essid
	Title: Paper-ID: Authors:	Academical Efficiency Comparsion of Countries via DEA P098 Hasan Bal, Ayhan Gölcükcü
Environment; Chair: Tomas Balezentis		
Session 4: 09:00–10:30 **Parallel Venue 6: Neuer Senatssaal**	Title: Paper-ID: Authors:	Eco-Efficiency Assessment of World-Class Mining Companies P070 Renata Oliveira, Ana Camanho, Andreia Zanella
	Title: Paper-ID: Authors:	Regional Opportunity Costs of Environmental Regulations in Turkish Manufacturing Industry P147 Yücel Özkara, Mehmet Atak
	Title: Paper-ID: Authors:	Development and Urban Sustainability: An Analysis from Eco-Efficiency through DEA P027 Clara Pardo, William Alfonso
	Title: Paper-ID: Authors:	Environmental Performance of Lithuanian Economic Sectors: A DEA Approach P083 Tomas Balezentis, Irena Krisciukaitene, Dalia Streimikiene, Alvydas Balezentis

Detailed Schedule of Presentations

Other Applications; Chair: Andreas Kleine		
Session 4: 09:00–10:30 **Parallel Venue 7: PK 4.4**	Title: Paper-ID: Authors:	How Well is the Museum Performing? A Joint Use of Data Envelopment Analysis (DEA) and Balanced Scorecard (BSC) to Measure the Performance of Museums P075 Antonella Basso, Francesco Casarin, Stefania Funari
	Title: Paper-ID: Authors:	Global Public Spending Efficiency in Tuscan Municipalities P129 Giovanna D'Inverno, Laura Carosi, Letizia Ravagli
	Title: Paper-ID: Authors:	Performance Evaluation of the Public Employment Services in Finland P131 Juha Eskelinen, Abolfazl Keshvari
	Title: Paper-ID: Authors:	Dynamic Efficiency Evaluation of German Public Multidisciplinary Theatres by RC-DEA Model P202 Andreas Kleine, Steffen Hoffmann

Session 5

Thursday 27th August, 2015

13:30–15:00

Detailed Schedule of Presentations

Modeling and Application; Chair: Mehmet Ali Cengiz		
Session 5: 13:30–15:00 **Parallel Venue 1: SN 19.2**	Title: Paper-ID: Authors:	Symmetric Error Structure in Stochastic DEA P062 Mohammad Hassan Behzadi, Mahnaz Mirbolouki
	Title: Paper-ID: Authors:	Rational Inefficiency, Adjustment Costs and Sequential Technologies P063 Benjamin Hampf
	Title: Paper-ID: Authors:	Transforming towards Smart Government in Dubai: An Efficiency Analysis P001 Hazza Alnuaimi, Ozren Despic, Ali Emrouznejad
	Title: Paper-ID: Authors:	Unbiased Efficiency Estimators: A Bayesian DEA Approach P118 Haktan Sarikaya, Panagiotis Zervopoulos, Francisco Vargas Serrano
	Title: Paper-ID: Authors:	Measuring Efficiency of Research and Development Expenditures Using Bayesian Stochastic Frontier Analysis for EU Countries P190 Mehmet Ali Cengiz, Tuba Koç, Serpil Gümüştekin, Haydar Koç

Detailed Schedule of Presentations

Theory and Modeling; Chair: Kristiaan Kerstens		
Session 5: 13:30–15:00 **Parallel Venue 2: SN 19.7**	Title: Paper-ID: Authors:	An Algorithm to Select a Radial/Non-radial Model in Data Envelopment Analysis P136 Mohammad Nourani, Dariush Khezrimotlagh
	Title: Paper-ID: Authors:	Support of Efficient Resource Allocation of Technological Processes by a Heuristic Solution and Agent Technology P049 Ágnes Werner-Stark, Tibor Dulai, Gyula Ábrahám
	Title: Paper-ID: Authors:	Virtual-Gap Measurement based Model to Assess Two-stage DEA with Shared Inputs and Shared Outputs P271 Fuh-Hwa Liu, Jun-Yan Lee
	Title: Paper-ID: Authors:	Frontier Metatechnologies and Convexity: A Restatement P223 Kristiaan Kerstens, Christopher O'Donnell, Ignace Van de Woestyne

Detailed Schedule of Presentations

Banking and Finance; Chair: Hirofumi Fukuyama		
Session 5: 13:30–15:00 **Parallel Venue 3: PK 4.1**	Title: Paper-ID: Authors:	Observing Choice of Loan Method in Not-for-profit Microfinance Efficiency: A Non-oriented Data Envelopment Analysis Application P274 Indra Widiarto, Ali Emrouznejad, Leonidas Anastasakis
	Title: Paper-ID: Authors:	Measuring the Mutual Fund Performance in Data Envelopment Analysis P278 Haochen Guo
	Title: Paper-ID: Authors:	Decision-oriented Performance Measurement Framework: An Emphasis on Rationality P212 Minh Hanh Le, Heinz Ahn, Mohsen Afsharian
	Title: Paper-ID: Authors:	Measurement of Banking Efficiency in Visegrad Countries: A DEA Window Analysis P144 Iveta Paleckova
	Title: Paper-ID: Authors:	Metatechnology, Group Technologies and Nonconvexity: An Application to Japanese Banking P259 Hirofumi Fukuyama
Transportation; Chair: Ana Camanho		
Session 5: 13:30–15:00 **Parallel Venue 4: SN 19.3**	Title: Paper-ID: Authors:	On the Relationship between Technical Efficiency and Logistics Services: Brazilian Market Case P184 Carlos Ernani Fries, Fernanda Christmann
	Title: Paper-ID: Authors:	Evaluation of Efficiency and Effectiveness of Public Transport Sector of India Using DEA Approach P146 Shivi Agarwal
	Title: Paper-ID: Authors:	Industry Restructuring: An Analysis of Potential Horizontal Mergers among European Automobile Plants P246 Jonathan Calleja-Blanco, Emili Grifell-Tatjé
	Title: Paper-ID: Authors:	A New Index to Assess Productivity Chance Over Time Using Directional Distance Functions P071 Ana Camanho, Andreia Zanella, Teresa Dias

Detailed Schedule of Presentations

Education; Chair: Sahand Daneshvar		
Session 5: 13:30–15:00 **Parallel Venue 5: SN 19.4**	Title: Paper-ID: Authors:	Efficiency of Public Educational Expenditure in China P041 Zhiqian Yu
	Title: Paper-ID: Authors:	Measuring Inefficiency in Vietnamese Private Universities: An Application of the Bootstrap Directional Distance Approach P074 Renato Villano, Carolyn D.T.T. Tran
	Title: Paper-ID: Authors:	Efficiency Measure of British Universities with PROMETHEE Efficiency Analysis P037 Alessio Ishizaka, Bertrand Mareschal
	Title: Paper-ID: Authors:	Computing the Malmquist Index Using Data Envelopment Analysis as an Improvement Measure for Educational Purposes P022 Sahand Daneshvar, Gokhan Izbirak, Adamu Musa Binyuy

Detailed Schedule of Presentations

Modeling and Application; Chair: Victor Podinovski		
Session 5: 13:30–15:00 **Parallel Venue 6: Neuer Senatssaal**	Title: Paper-ID: Authors:	Examining the Efficiency of MGNREGS in North Eastern States of India using the Data Envelopment Analysis Approach P255 Indraneel Bhowmik, Pritam Bose
	Title: Paper-ID: Authors:	Estimating Right- and Left-hand Returns to Scale in the Presence of Undesirable Factors: A DEA Approach P032 Mohammad Khoveyni, Robabeh Eslami
	Title: Paper-ID: Authors:	An Improved DEA-SVR Method for Predicting Efficiency of Large DMUs P207 Mohammadreza Farahmand, Mohammad Ishak Desa, Ali Emrouznejad, Mehrbakhsh Nilashi
	Title: Paper-ID: Authors:	Public Sector Contribution to Competitiveness P143 Giuliano Resce, Vincenzo Patrizii
	Title: Paper-ID: Authors:	Combining the Assumptions of VRS and CRS in One DEA Model: An Application to Schools P103 Victor Podinovski

Detailed Schedule of Presentations

Other Applications; Chair: Adel Hatami-Marbini		
Session 5: 13:30–15:00 **Parallel Venue 7: PK 4.4**	Title: Paper-ID: Authors:	Demand and Supply Evaluation of Urban Facilities Needed for Management of Tehran after an Earthquake: A DEA Approach P272 Mohammad Taleai, Amir Hosein Rahnama
	Title: Paper-ID: Authors:	Performance Evaluation of India States in terms of Socio-economic Indicators P203 Chiranjib Neogi, Labanya Pal
	Title: Paper-ID: Authors:	Does it Make a Difference? The Development of a Performance Appraisal Based on DEA and Employee´s Responses to it P204 Manuela Koch-Rogge, Georg Westermann
	Title: Paper-ID: Authors:	The Environmental Cost of Human Development: A Data Envelopment Analysis Approach P242 Soulef Khalfallah
	Title: Paper-ID: Authors:	Performance Evaluation of R&D Firms for Generating Insights into Innovation Systems P261 Pegah Khoshnevis, Peter Teirlinck, Adel Hatami-Marbini