

Curriculum vitae Peter Borm: an extract

Peter Borm (11-06-1963):

professor of Mathematics and Game Theory (since 2001), Department of Econometrics and OR (EOR), TISEM, Tilburg University. Employed by Tilburg University since 1990. PhD in Mathematics and Computer Science from Radboud University Nijmegen (1990).

Research interests:

cooperative and non-cooperative game theory, strategic behavior, joint allocation problems, operations research problems, game practice: relative skill.

Education (*lectures, tutorials, coordination, development, coaching, awards*):

analysis for EOR, statistics for EOR, statistical decision theory for EOR, advanced analysis for EOR, advanced probability for EOR, mathematics for ECO, IB and BS, a variety of game theory courses for Bachelor MSc in EOR, CentER Research Master, and the Dutch LNMB and NAKE PhD networks, Orientation Research Topics in OR for CentER GPB research master and PhD program. UTQ in 2019. Personal coaching activities within the Outreaching honors program. Several awards such as TISEM best MSc teacher, TISEM best course award and excellent teacher award.

Administration: Among other things: Graduate program coordinator (GPC) for the OR-track RM-PhD (2017 - present), LNMB (Dutch PhD network in OR) board member (2002-2011, 2020-present), TiU confidential advisor (2010-2014), Head of Department EOR (2002-2008).

Supervised Phd theses:

Current PhD students: Jop Schouten (2022), Andries van Beek (2023), Martijn Ketelaars (2024).

Bas Dietzenbacher (2018): Egalitarian allocation principles.

Marieke Musegaas (2017): Cooperative games and network structures.

Sybren Huijink (2016): Cooperation: vehicle routing and outsourcing, games and nucleoni.

Soesja Grundel (2015): Essays on cooperation in resource allocation and scheduling.

Mirjam Groote Schaarsberg (2014): Interactive operational decision making: purchasing situations and mutual liability problems.

Edwin Lohmann (2012): Joint decision making and cooperative solutions.

Roy Lindelauf (2011): Design and analysis of covert networks, affiliations and projects.

John Kleppe (2010): Modelling interactive behaviour, and solution concepts.

Baris Ciftci (2009): A cooperative approach to sequencing and connection problems.

Marieke Quant (2006): Interactive behavior in conflict situations.

Arantza Estevez-Fernandez (2006): Cooperative behaviour, competition and operations research.

Emilia Lazarova (2006): Stability, governance and effectiveness: essays on the service economy.

Bas van Velzen (2005): Cooperation in networks and scheduling.

Marcel Dreef (2005): Skill and strategy in games.

Ruud Hendrickx (2004): Cooperation and allocation.

Yuan Ju (2004): Cooperation, compensation and transition.

Judith Timmer (2001): Cooperative behaviour, uncertainty and operations research.

Maurice Koster (1999): Cost sharing in production situations and network exploitation.

Mark Voorneveld (1999): Potential games and interactive decisions with multiple criteria.

Jeroen Suijs (1998): Cooperative decision making in a stochastic environment.

Gert Jan Otten (1995): On decision making in cooperative situations.

Vincent Feltkamp (1995): Cooperation in controlled network structures.

Herbert Hamers (1995): Sequencing and delivery situations: a game theoretic approach.

Scientific publications (1987- present):

161 in total

Scientific publications (2012-2021):

Van Beek, Borm, Quant (2021): Axiomatic characterizations of a proportional influence measure for sequential projects with imperfect reliability. *Axioms*

Dietzenbacher, Estevez-Fernandez, Borm, Hendrickx (2020): Proportionality, equality, and duality in bankruptcy problems with nontransferable utility. *Annals of Operations Research*

Dietzenbacher, Estevez-Fernandez, Borm, Hendrickx (2020): A procedural egalitarian solution for NTU-games. *Discrete Applied Mathematics*

Dietzenbacher, Borm, Estevez-Fernandez (2020): NTU bankruptcy problems: consistency and the relative adjustment principle. *Review of Economic Design*

Funaki, Borm, Ju (2020): The balanced threat agreement for individual externality negotiation problems. *Homo Oeconomicus*

Ketelaars, Borm, Quant (2020): Decentralization and mutual liability rules. *Mathematical methods of Operations Research*

Estevez-Fernandez, Borm, Fiestras-Janeiro (2020): Nontransferable utility bankruptcy games. *TOP*

Saavedra-Nieves, Schouten, Borm (2020): On interactive sequencing situations with exponential cost functions. *European Journal of Operational Research*

Schouten, Borm, Hendrickx (2019): Unilateral support equilibria. *Journal of Mathematical Psychology*

Grundel, Borm, Hamers (2019): Resource allocation problems with concave reward functions. *TOP*

Kleppe, Borm, Hendrickx, Reijnierse (2018): On analyzing cost allocation problems: cooperation building structures and order problem representations. *International Game Theory Review*

Musegaas, Borm, Quant (2018): Three-valued simple games. *Theory and Decision*

Groote Schaarsberg, Reijnierse, Borm (2018): On solving mutual liability problems. *Mathematical Methods of Operations Research*

Musegaas, Borm, Quant (2018): On the convexity of step out - step in sequencing games. *TOP*

Dietzenbacher, Borm, Hendrickx (2017): The procedural egalitarian solution. *Games and Economic Behavior*

Estevez-Fernandez, Borm, Fiestras-Janeiro, Mosquera, Sanchez-Rodriguez (2017): On the 1-nucleolus. *Mathematical Methods of Operations Research*

Karsten, Slikker, Borm (2017): Cost allocation for elastic single-attribute situations. *Naval Research Logistics*

Kleppe, Borm, Hendrickx (2017): Fall back proper equilibrium. *TOP*

Dietzenbacher, Borm, Hendrickx (2017): Decomposition of network communication games. *Mathematical Methods of Operations Research*

Musegaas, Dietzenbacher, Borm (2016): On Shapley ratings in brain networks. *Frontiers in Neuroinformatics*

Musegaas, Borm, Quant (2016): Simple and three-valued simple coloring games. *Mathematical Methods of Operations Research*

Lazarova, Borm, Estevez-Fernandez (2016): Transfers and exchange stability in two-sided matching problems. *Theory and Decision*

Borm, van der Genugten (2016): Texas Hold'em, a game of skill. *International Game Theory Review*

Musegaas, Borm, Quant (2015): Step out - step in sequencing games. *European Journal of Operational Research*

Huijink, Borm, Kleppe, Reijnierse (2015): Bankruptcy and the per capita nucleolus: the claim-and-rights rules family. *Mathematical Social Sciences*

Husslage, Borm, Burg, Hamers, Lindelauf (2015): Ranking terrorists in networks: a sensitivity analysis of Al Qaeda's 9/11 attack. *Social Networks*

Borm, Ju, Wettstein (2015): Rational bargaining in games with coalitional externalities. *Journal of Economic Theory*

Sanchez-Rodriguez, Borm, Estevez-Fernandez, Fiestras-Janeiro, Mosquera (2015): k-core covers and the core. *Mathematical Methods of Operations Research*

Lohmann, Borm, Slikker (2014): Sequencing games with just-in-time arrival, and related games. *Mathematical Methods of Operations Research*

Gonzalez-Alcon, Borm, Hendrickx (2014): Nash equilibria in 2x2x2 trimatrix games with identical anonymous best-replies. *International Game Theory Review*

Tejada, Borm, Lohmann (2014): A unifying model for matrix-based pairing situations. *Mathematical Social Sciences*

Groote Schaarsberg, Borm, Hamers, Reijnierse (2013): Game theoretic analysis of cooperative purchasing situations. *Naval Research Logistics*

Ciftci, Borm, Hamers, Slikker (2013): Batch sequencing and cooperation. *Journal of Scheduling*

Marban, van de Ven, Borm, Hamers (2013): ALOHA networks: a game-theoretic approach. *Mathematical Methods of Operations Research*

Kleppe, Borm, Hendrickx (2013): Fall back equilibrium for 2xn bimatrix games. *Mathematical Methods of Operations Research*

Grundel, Borm, Hamers (2013): Resource allocation games: a compromise stable extension of bankruptcy games. *Mathematical Methods of Operations Research*

Grundel, Ciftci, Borm, Hamers (2013): Family sequencing and cooperation. *European Journal of Operational Research*

Slikker, Borm, van den Brink (2012): Internal slackening scoring methods. *Theory and Decision*

Hendrickx, Thijssen, Borm (2012): Minimum cost spanning tree games and spillover stability. *Theory and Decision*

Lohmann, Borm, Herings (2012): Minimal exact balancedness. *Mathematical Social Sciences*

Kleppe, Borm, Hendrickx (2012): Fall back equilibria. *European Journal of Operational Research*

Estevez-Fernandez, Borm, Hamers (2012): a note on passepartout problems. *International Game Theory Review*

Lindelauf, Borm, Hamers (2012): One-mode projection analysis and design of covert affiliation networks. *Social Networks*

Contract research:

in total 9 reports on the topic of relative skill in casino games (1991-2009) . The most recent report is:

Borm, van der Genugten (2009): Cash-en toernooipoker: behendigheidspele? In opdracht van W.M.C. van den Berg, rechter-commissaris in Amsterdam.