

## PERSONAL DATA

Name: Dr. Péter Biró

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## EDUCATION AND DEGREES

- Ph.D in Mathematics and Computer Science, Budapest University of Technology and Economics, 2003 – 2008
- MSc in Mathematics, Budapest University of Technology and Economics, 1997 – 2003

## LANGUAGES

Hungarian (native), English (fluent), French (intermediate)

## RESEARCH INTERESTS

**Research areas:** cooperative game theory, matching theory, mechanism design, algorithmic game theory, computational social choice

**Involvements in applications:** Hungarian higher education matching scheme, UK national matching scheme for kidney exchanges organised by NHS Blood and Transplant, Scottish Foundation Allocation Scheme (resident matching program), Estonian kindergarten allocation, CEMS Business project allocation for Corvinus University of Budapest

## RESEARCH EXPERIENCE/APPOINTMENTS

- Stanford University, Department of Economics, visiting professor, February 2014 – January 2015
- **Hungarian Academy of Sciences, Centre for Economic and Regional Studies, Institute of Economics, senior research fellow, October 2010 –**
- University of Glasgow, Department of Computing Science, Post-doctoral research assistant, June 2007 – September 2010

## TEACHING EXPERIENCE

- **Corvinus University of Budapest, Department of Operations Research and Actuarial Sciences, part-time lecturer, September 2012 –**
- Budapest University of Technology and Economics, Department of Computer Science and Information Theory, Teaching assistant, September 1998 - May 2007

## MAIN RESEARCH GRANT/PROJECT AS PRINCIPAL INVESTIGATOR

- Kidney exchange programmes: computational, game theoretical, and economic aspects, Hungarian Scientific Research Fund, OTKA, Grant No. K128611., 33852k HUF, September 2018 – August 2021
- Heuristic problem solving in matching mechanisms, Hungarian Academy of Sciences, Cooperation of Excellences Project grant, Hungarian Academy of Sciences, 120000k HUF, November 2017 – June 2020
- Complex design of matching markets, Hungarian Academy of Sciences, Momentum grant, 100000k HUF, July 2016 – June 2021

- Cooperative games with capacities, Hungarian Scientific Research Fund, OTKA, Grant No. K108673, 15444k HUF, September 2013 – August 2016

## **MAIN RESEARCH GRANTS/PROJECTS AS PARTICIPANT**

- Efficiency and equity in matching kindergarten and school seats and children: mechanism design approach, Estonian research grant, participant, January 2014 –
- Mathematics of Economics models, OTKA, participant, September 2013 –
- Discrete matching and assignment problems, Hungarian-Slovakian Tét fund, participant, September 2009 – August 2011
- Stable matchings and their applications, OTKA, participant, August 2007 – July 2011

## **FURTHER GRANTS**

- 2016, MTA Grant for Conference Participation, 292k HUF, for participating in the 5<sup>th</sup> World Congress of the Game Theory Society, Maastricht, Netherlands
- 2016, IC1205 COST Action on Computational Social Choice, Grant for Short-term Scientific Mission, 1260EUR, for visiting Haris Aziz in Sydney
- 2015, IC1205 COST Action on Computational Social Choice, Grant for Short-term Scientific Mission, 630EUR, for visiting Jerome Lang in Paris
- 2013, MTA Grant for Conference Organisation, 900k HUF, for organising the Summer school on matching problems, markets and mechanisms: the first summer school of the IC1205 COST Action on Computational Social Choice
- 2012, MTA Grant for Conference Participation, 260k HUF, for participating in the 4<sup>th</sup> World Congress of the Game Theory Society, Istanbul, Turkey

## **ACTIVITIES IN SCIENTIFIC ORGANISATIONS**

- CA15210 COST Action: European Network for Collaboration on Kidney Exchange Programmes, MC member and chair of the first working group, November 2016-March 2019
- IC1205 COST Action on Computational Social Choice, MC member and chair of the matching mechanisms working group, November 2012 – October 2016
- Matching in Practice network, member of the executive committee, December 2010 –
- Hungarian Operations Research Society, member of the executive committee, May 2018 – May 2020
- János Bolyai Mathematical Society, member, June 2006 -

## **CONFERENCE ORGANISATION**

- EC-2020: The Twenty-First ACM Conference on Economics and Computation, 13-17 July, Budapest, General Chair
- Conference on Economic Design, 12-14 June 2019, Budapest, General Chair
- Workshop of the European Network for Collaboration in Kidney Exchange Programmes, 20-21 November 2018, Debrecen, General Chair
- The 12th Workshop on Matching in Practice, 15 December 2016, Budapest - member of the organising committee

- 100 Years of Matching Theory in Hungary, 14 December 2016, Budapest - member of the organising committee
- Workshop on Future Directions in Computational Social Choice: the last workshop of the IC1205 COST Action on Computational Social Choice, 21-22 November 2016, Budapest - member of the organising committee
- MATCH-UP 2015, The Third International Workshop on Matching Under Preferences, 16-18 April 2015, Glasgow - member of the organising committee, PC co-chair
- The Second Workshop of the IC1205 COST Action on Computational Social Choice, 16-18 October 2013, Barcelona - member of the scientific committee
- Summer school on matching problems, markets and mechanisms: the first summer school of the IC1205 COST Action on Computational Social Choice, 24-28 June 2013, Budapest - member of the organising committee, local organiser
- The Fifth Workshop on Matching in Practice, 20-21 May 2013, Brussels - member of the scientific committee
- The Fourth Workshop on Matching in Practice, 15 November 2012, Barcelona - member of the scientific committee
- MATCH-UP 2012, The Second International Workshop on Matching Under Preferences, 19-20 July 2012, Budapest - member of the organising committee, local organiser, PC co-chair
- SING8, The 8th Spain-Italy-Netherlands Meeting on Game Theory , 16-18 July 2012, Budapest - member of the local organising committee
- Frontiers in Market Design: Matching Markets, 20-23 May 2012, Monte Verita, Switzerland - member of the scientific committee
- The Third Workshop on Matching in Practice, 28 November 2011, Budapest - member of the organising committee, local organiser
- The Second Workshop on Matching in Practice, 30 May 2011, Brussels - member of the scientific committee
- COMSOC workshop, an informal workshop on Computational Social Choice, 3 May 2011, Budapest - organiser

#### **FURTHER PC MEMBERSHIPS**

- AAAI-2020 (senior PC), MATCH-UP-2019, AAAI-2019, AAMAS-2019, IJCAI-2019, AAMAS-2018, IJCAI-2018, COMSOC-2018, EC-2018, MATCH-UP 2017, CoopMAS-2017, EXPLORE-2017, EC-2017, CP-2016, SCW-2016, COMSOC-2016, CoopMAS-2016, EXPLORE-2016, CoopMAS-2015, EXPLORE-2015, CoopMAS-2014, SCW-2014, CoopMAS-2013, AAMAS-2012

#### **EDITORIAL WORK**

- Associate Editor of Mathematical Social Sciences (2015 May - )
- Associate Editor of Journal of Mechanism and Institutional Design (2015 May - )
- Guest editor of a special issue in Algorithms, joint with David Manlove: Matching Under preferences (2012-2013)