



2021 Zimanyi Medal

## ***Jozsef Zimanyi (1931 - 2006)***

Renowned Hungarian physicist; chair of Science Council of KFKI; Academician.

Hungarian representative on the CERN Council (1992 - 2004).

Széchenyi Prize (2000).

Pioneered the notions of hadrochemistry and quarkochemistry in quark matter research; and one of the pioneers of the use of the relativistic hydrodynamical model for nuclear collisions. Established Budapest heavy ion physics research school that is continued by his students.

Zimanyi Medal award was established in 2011.



# Zimanyi Medal Rules

***The Zimanyi Medal is awarded to an outstanding young researcher working in heavy-ion physics theory. The research field is understood as generously wide, but it is oriented on Jozsef Zimanyi's life work. No distinction, neither positive nor negative, can be made on the ground of race, gender, or nationality.***

Anyone who left this field of research (even if only recently) cannot be awarded this medal. An awardee must not have completed the fortieth year after birth (exceed the age of 39) until the beginning of the Quark Matter conference at which the Medal is awarded. The award cannot be shared among several persons.

# Selection Process

## The Selection Committee

Helen Caines (Yale)  
Csörgő, Tamás (ZPF)  
Hannah Elfner (FIAS/GSI)  
Eskola, Kari (Jyväskylä)  
Fukushima, Kenji (Tokyo)  
Grassi, Frédérique (Sao Paulo)  
Jacak, Barbara (LBNL)  
Aleksi Kurkela (Stavanger)  
Lévai, Péter (Wigner Inst.)  
McLerran, Larry (INT Seattle)  
Molnár, Dénes (Purdue)  
Ollitrault, Jean-Yves (Saclay)  
Sasaki, Chihiro (Wroclaw)  
Schenke, Björn (BNL)  
Wang, Xin-Nian (CCNU)  
Wiedemann, Urs (CERN)

*Mueller, Berndt (chair)*  
*Bíró, Tamás (Zimanyi Foundation)*

## The Selection Process

Nomination round (18 nominees)

1<sup>st</sup> voting round (3 votes each)

→ short list (7 candidates)

2<sup>nd</sup> voting round (2 votes each)

→ finalists (2 candidates)

3<sup>rd</sup> voting round (1 vote each)

→ winner

## Previous Winners

2011 *Tetsufumi Hirano*

2012 *Péter Petreczky*

2014 *Tuomas Lappi*

2015 *Chihiro Sasaki*

2017 *Björn Schenke*

2018 *Hannah Petersen (Elfner)*

2019 *Aleksi Kurkela*

# The Winner 2022



## **Sören Schlichting**

2009 B.Sc. (Darmstadt)

2010 M.Sc. (Michigan State U)

2013 Ph.D. (Heidelberg)

2013-2016 Goldhaber Fellow (BNL)

2016-2018 Res. Asst. Prof. (Seattle)

2018- Junior Professor (Bielefeld)

51 refereed publications

2528 citations on INSPIRE-HEP

*h*-Index 28

# Primary Accomplishments

**S. Schlichting** and S. Pratt,

Charge conservation at energies available at the BNL RHIC and contributions to local parity violation observables  
Phys. Rev. C 83, 014913 (2011) [arXiv:1009.4283 [nucl-th]]

171 citations

J. Berges, K. Boguslavski, **S. Schlichting** and R. Venugopalan

Turbulent thermalization process in heavy-ion collisions at ultrarelativistic energies  
Phys. Rev. D 89, 074011 (2014) [arXiv:1303.5650 [hep-ph]]

228 citations

N. Müller, **S. Schlichting** and S. Sharma

Chiral magnetic effect and anomalous transport from real-time lattice simulations  
Phys. Rev. Lett. 117, 142301 (2016) [arXiv:1606.00342 [hep-ph]]

51 citations

M. Mace, **S. Schlichting** and R. Venugopalan

Off-equilibrium sphaleron transitions in the Glasma  
Phys. Rev. D 93, 074036 (2016) [arXiv:1601.07342 [hep-ph]]

75 citations

A. Kurkela, A. Mazeliauskas, J. F. Paquet, **S. Schlichting** and D. Teaney,

Matching the Nonequilibrium Initial Stage of Heavy Ion Collisions to Hydrodynamics with QCD Kinetic Theory  
Phys. Rev. Lett. 122, 122302 (2019) [arXiv:1805.01604 [hep-ph]]

111 citations

# The really important stuff

## The 2022 Zimányi Medal on Nuclear Theory



awarded to

*Sören Schlichting*

and presented

at the **Quark Matter 2022 Conference**  
**Cracow, Poland**

For his groundbreaking work on turbulence in Yang-Mill fluids and its implications for thermalization in heavy ion collisions, and his important contribution to matching the nonequilibrium initial stage of heavy ion collisions to hydrodynamics with QCD kinetic theory.

Prof. Tamás Sándor Bíró  
Chair of Zimányi Physics  
Foundation

Prof. Berndt Müller  
Chair of the Selection  
Committee



Wigner Research Centre for Physics

*Congratulations!*



Two thousand dollars

\$ 2000

For Sören Schlichting

Who is the Winner of Zimányi Medal 2022