THE 2019 MICHAEL BRIN PRIZE IN DYNAMICAL SYSTEMS

Professor Michael Brin of the University of Maryland endowed an international prize for outstanding work in the theory of dynamical systems and related areas. The prize is given annually (since 2017) for specific mathematical achievements that appear as a single publication or a series thereof in refereed journals, proceedings or monographs (the prize was awarded biennially for the first five editions from 2008 to 2015).

The prize recognizes mathematicians who have made substantial impact in the field at an early stage of their careers.

The eighth Michael Brin prize in Dynamical Systems was awarded by an international committee of experts chaired by Giovanni Forni.

Its members were Viviane Baladi, Helmut Höfer, Elon Lindenstrauss, Carlangelo Liverani, Hee Oh, and Federico Rodriguez Hertz.

The prize was awarded at the 2019 Workshop in Dynamical Systems and Related Topics at the Pennsylvania State University.

The Eighth Michael Brin Prize in Dynamical Systems was awarded to **Sébastien Gouëzel** for his groundbreaking and influential work on the spectral theory of transfer operators and on statistical properties of hyperbolic dynamical systems and random walks on hyperbolic groups.

Sébastien Gouëzel

The award ceremony included two one-hour lectures about various aspects of the winner's work by Dmitry Dolgopyat and François Ledrappier, who are renowned experts in the area.

Articles by D. Dolgopyat and F. Ledrappier based on their lectures appear in the present volume of the Journal of Modern Dynamics.

PRIZE WORK OF SÉBASTIEN GOUËZEL

(with Liverani, Carlangelo) *Banach spaces adapted to Anosov systems*, Ergodic Theory Dynam. Systems, **26** (2006), 189–217.

Almost sure invariance principle for dynamical systems by spectral methods, Ann. Probab., **38** (2010), 1639–1671.

(with Avila, Artur) *Small eigenvalues of the Laplacian for algebraic measures in moduli space, and mixing properties of the Teichmüller flow*, Ann. of Math. (2), **178** (2013), 385–442.

Local limit theorem for symmetric random walks in Gromov-hyperbolic groups, J. Amer. Math. Soc., **27** (2014), 893–928.

PRIZE LECTURES

DMITRY DOLGOPYAT: *Work of Sébastien Gouëzel on limit theorems and on Banach spaces adapted to dynamical systems.*

FRANÇOIS LEDRAPPIER: *Sébastien Gouëzel, problem solver.*

François Ledrappier   Sébastien Gouëzel   Dmitry Dolgopyat