

André Lichnerowicz Prize in Poisson geometry – 2020

The André Lichnerowicz Prize in Poisson geometry was established in 2008. It is awarded for notable contributions to Poisson geometry, every two years at the International Conference on Poisson Geometry in Mathematics and Physics, to researchers who completed their doctorates at most eight years before the year of the Conference.

The prize is named in memory of André Lichnerowicz (1915-1998) whose work was fundamental in establishing Poisson geometry as a branch of mathematics. It is awarded by a jury composed of the members of the scientific/advisory committee of the conference.

The prize for the year 2020 was awarded to

Pavel Safronov and Xiaomeng Xu,

On May 27, 2021 during the Global Poisson Webinar

<https://youtu.be/zlcaLabUVCw>

Pavel Safronov (University of Edinburgh)

Pavel Safronov completed his PhD degree in 2014 at the University of Texas at Austin under supervision of David Ben-Zvi. After postdoctoral positions in Oxford, Bonn and Geneva, and a lectureship at the University of Zurich, he joined the University of Edinburgh as a Lecturer.

Safronov is awarded an André Lichnerowicz Prize in Poisson Geometry 2020/2021 for his fundamental contributions in shifted Poisson geometry and in deformation quantization theory. He advanced the understanding of classical notions of symplectic reduction and of Poisson-Lie groups within the framework of shifted Poisson geometry. His results on deformation quantization led to applications to the Bonahon-Wong conjecture on Azumaya locus of the Kauffman bracket and to Witten's conjecture on finiteness of skein modules in quantum topology.

Xiaomeng Xu (Peking University)

Xiaomeng Xu completed his PhD degree in 2016 at the University of Geneva, under the supervision of Anton Alekseev. After a postdoctoral position at MIT, he joined Peking University as an Assistant Professor.

In his work, Xu constructed explicit Ginzburg-Weinstein linearizations of Poisson-Lie groups and their quantization. His results on the relationships between Stokes phenomena, Yang-Baxter equations, and Frobenius manifolds, uncovered deep connections between the theory of meromorphic ODE's with higher order poles and the theory of quantum groups. Xu also used classical integrable systems on Lie-Poisson spaces to study the structure of Stokes matrices, which advanced the understanding of Stokes phenomena and isomonodromy deformations. In earlier work, Xu has contributed to the theory of Courant algebroids, string principal bundles, and homotopy Poisson manifolds as objects in higher structure aspects of Poisson geometry.