Whitehead Prize: citation for Tadahiro Oh

Short citation:

Professor Tadahiro Oh of the University of Edinburgh is awarded a Whitehead prize for his contributions to the theory of dispersive PDEs, in particular to the understanding of their interaction with random data.

Long citation:

Professor Tadahiro Oh of the University of Edinburgh is awarded a Whitehead prize for his contributions to the theory of dispersive PDEs, in particular to the understanding of their interaction with random data.

It has been known since the 1990s that it is possible to construct global low-regularity solutions for some dispersive PDEs by drawing their initial data randomly from suitable probability distributions. In a series of works with Colliander and others, Oh has greatly expanded our understanding of this phenomenon.

Another quantum leap was his 2018 work with Gubinelli and Koch in which they succeeded in constructing a natural type of solutions to the quadratic nonlinear wave equation driven by space-time white noise. This was the first time that the circle of recent ideas originating in the analysis of singular parabolic SPDEs was