Fields Medals 2022

Fields medal is often described as the **Nobel Prize in mathematics,** The Fields Medal is awarded every four years to one or more mathematicians under the age of 40.

Fields Medal is awarded at the International Congress of the **International Mathematical Union (IMU)**

Fields medal is awarded to recognize outstanding mathematical achievement for existing work and for the promise of future achievement

The 1924 ICM in Toronto adopted a resolution that at each conference, two gold medals would be awarded to recognise outstanding mathematical achievement. It was first awarded in 1936

The medals and cash prizes are funded by a trust established by J.C.Fields at the University of Toronto, which has been replenished periodically, but is still significantly underfunded

AWARDEES 2022

Hugo Duminil-Copin (France)

For solving longstanding problems in the probabilistic theory of phase transitions in statistical physics, especially in dimensions three and four.

June Huh (USA)

For bringing the ideas of Hodge theory to combinatorics, the proof of the Dowling–Wilson conjecture for geometric lattices, the proof of the Heron–Rota–Welsh conjecture for matroids

James Maynard (UK)

For contributions to analytic number theory, which have led to major advances in the understanding of the structure of prime numbers and in Diophantine approximation

Maryna Viazovska (Ukraine)

For the proof that the $E8$ lattice provides the densest packing of identical spheres in 8 dimensions, and further contributions to related extremal problems and interpolation problems in Fourier analysis