



DEUTSCHE GESELLSCHAFT FÜR  
ELEKTRONENMIKROSKOPIE

(eingetragener Verein)

<http://www.dge-homepage.de>

## Press Release

October 21, 2022

### Ernst Ruska Prize 2023 for Dr Vincenzo Grillo

The German Society for Electron Microscopy (Deutsche Gesellschaft für Elektronen-mikroskopie, DGE) awards the internationally renowned Ernst Ruska Prize to **Dr Vincenzo Grillo** (CNR Institute of Nanoscience, Modena, Italy) for his outstanding scientific achievements related to electron microscopy. The prize will be awarded at his plenary lecture during the Microscopy Conference MC2023 in Darmstadt on March 1<sup>st</sup>, 2023.

**Vincenzo Grillo** is awarded the prize for his pioneering achievements in advancing the boundaries in quantum electron optics and methodological technique and instrumentation development. He has been using specialized nanofabrication techniques to shape electron beams and to structure electron waves, where he started an original theoretical activity for electron-beam-shaping simulations based on the first Pauli equation-based multi-slice simulation of electron scattering. He developed and demonstrated experimentally an innovative device that is referred to as an electrostatic orbital angular momentum (OAM) sorter for electrons. The electrostatic OAM sorter combines MEMS technology with neural network control to build a flexible new system of electron optics.

The **Ernst Ruska Prize** is named after the Nobel prize winner and inventor of the electron microscope, Prof Dr Ernst Ruska. The international prize is awarded by the German Society for Electron Microscopy every two years for outstanding achievements in the field of electron microscopy.

The President of the German Society for Electron Microscopy (DGE)

Prof Dr Peter A. van Aken  
Max Planck Institute for Solid State Research  
Stuttgart Center for Electron Microscopy  
Heisenbergstr. 1, 70569 Stuttgart, Germany  
[p.vanaken@fkf.mpg.de](mailto:p.vanaken@fkf.mpg.de)