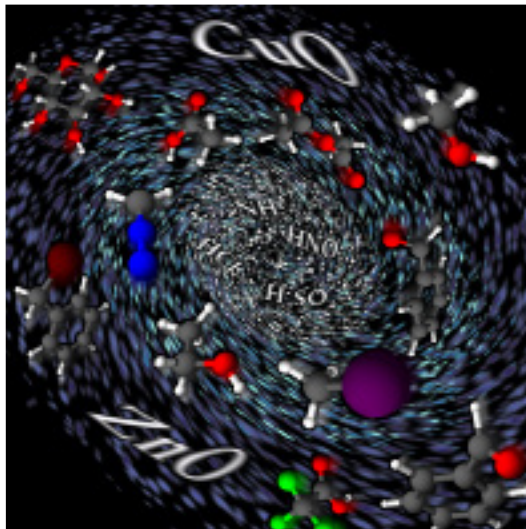


Friday 14 January 2022 at 14:15

Online (Zoom)



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Jürgen Jost*(MPI MiS Leipzig)*

Mathematics for exploring chemical space

Chemical space, as of today, consists of more than 20 million substances linked by more than 40 million reactions, and extensive data about its historical development over the last 200 years is available. In an ongoing project, Jost is developing mathematical tools for analyzing this structure and its dynamics.

The talk will describe some of these mathematical schemes, like discrete curvatures and spectral theory of hypergraphs, which also have other applications.

Jürgen Jost has been director and permanent member of the Max Planck Institute for Mathematics in the Sciences in Leipzig since 1996. After receiving his PhD in Mathematics at the University of Bonn in 1980, he obtained various postdoctoral and visiting positions at international institutions including the IAS in Princeton, UC in San Diego, ANU Canberra, MSRI in Berkeley, Harvard University, ETH Zürich and IHES in Paris. He was awarded the ERC Advanced Grant in 2010. He is also an external member at Santa Fe Institute for the Sciences of Complexity. ▀