

# Physics Colloquium Mainz

**May 28, 2024 at 16 c.t.**

Lecture room KPH,  
Johann-Joachim-Becher-Weg 45, JGU

Spherical magnets are an invaluable but [affordable physics toy!](#) While vividly demonstrating chemical, physical and mathematical problems, they can also greatly inspire creativity: Questions concerning the favoured state of [dipole cluster configurations](#) lead – via an encounter with [tipping points](#) – to the invention of [magnetic gears](#) based on [degenerate continua](#). Open source [animations](#) and patent-free [hardware to play with](#) shall garnish this triptychon.

**Magnetic Marbles' Mantras:  
Dipole Clusters, Catastrophe Machines,  
and Irrational Gears**

**Prof. Dr. Ingo Rehberg**

**University of Bayreuth**

Organized by  
Institute for Physics  
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