

# Physikalisches Kolloquium



UNIVERSITÄT  
BAYREUTH  
Physikalisches Institut

Kolloquium der Studierenden

## Cilia driven flow in the mammalian brain

The mammalian brain, including our own, has a system for transporting cerebrospinal fluid (CSF). This fluid is produced at the blood–brain barrier and then travels throughout the brain. In my talk, I will introduce this topic and discuss the intricate flow patterns driven by ciliated cells in the third ventricle. Using the mouse as an example, I will demonstrate that these flows are defined at the level of individual cells and develop after birth. We find that the flows are conserved between animals. These findings suggest that fluid physics plays a role in how our brain functions.

**Dienstag, 28. Oktober 2025 | 17 Uhr s.t. | Hörsaal H18 (NW II)**



**Prof. Dr. Dr. h. c.  
Eberhard Bodenschatz**

Max Planck Institut  
für Dynamik & Selbstorganisation,  
Göttingen

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