

## Einladung zu einem Kolloquium

Datum/Zeit: **Dienstag, 17.09.2024, 16.45 Uhr**

Referent: **Prof. Fabien Ferrage**  
Ecole Normale Supérieure (ENS), Paris, Frankreich

Titel: *Sample-shuttle NMR for molecular dynamics, interactions and more*

Ort: **HCI G7**

The development of NMR spectrometers at higher and higher magnetic fields has contributed tremendously to the progress of NMR and its ability to tackle systems of increasing complexity. Yet, not all NMR properties are more favorable at high magnetic field ( $B_0 > 10$  T): working with lower magnetic fields ( $100 \mu\text{T} < B_0 < 5$  T) can provide more information about molecular motions or more favorable relaxation properties. Here, I will present how we use a fast sample shuttle to combine the resolution and sensitivity and high-field NMR with the advantages of lower fields within the same experiment. I will describe new prototypes developed by Bruker Biospin in close collaboration with our group and their use in the determination of molecular motions in biological macromolecules, the investigation of interactions of small molecules with proteins, and the development of new NMR methods.

**Gäste sind willkommen**