



**28.05.20 - 10:00 h**

At Zoom virtual meeting: <https://desy.zoom.us/j/97846492501?pwd=TXN0SjNiVIRhNmtqNmNabGdQUzBvQT09>  
Meeting ID: 978 4649 250 Password: 041556

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## Sérgio Rosa Domingos

### **"On the performance of rotational spectroscopy for chiral analysis: a double-blind challenge"**

Chirality plays a fundamental role in (bio)chemistry. Most biomolecules are chiral, having a stereoselective bias for specific biochemical interactions. The ability to determine the conformation and handedness of chiral molecules is thus crucial in establishing how molecular structure and biological activity are related. Chiroptical methods that can retrieve chiral information from a molecular system, either in isolation or in the condensed phase, are valuable tools with increasing demand in chemical and pharmaceutical sciences. Two experimental methods for chiral analysis using rotational spectroscopy will be showcased. Microwave 3-Wave Mixing and Chiral Tagging will be put to test, and their performance compared for the determination of the enantiomeric excess in a chiral mixture. The results of a recent double-blind challenge will be presented and discussed.