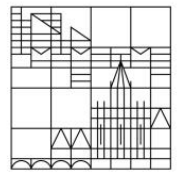


Physikalisches Kolloquium

Universität
Konstanz



Fr 18.06.21
15:15 Uhr
Zoom-Meeting:

[https://zoom.us/j/93182386888
?pwd=V2Zja1JWTE5qSHRCY
TRKYmVQczhEQT09](https://zoom.us/j/93182386888?pwd=V2Zja1JWTE5qSHRCYTRKYmVQczhEQT09)



Prof. Dr. Stefan Guldin
University College London

Addressing the bio-nano interface with molecular self-assembly

My research group is interested in the fundamental question of how materials form and interact on the nanoscale for applications in healthcare and the environment. In this talk, I will share some of our recent work on nanoscale colloidal building blocks, their spatial arrangement and interaction with chemical and biological targets. Of particular importance to our research is the development of suitable analytical methods, e.g. for the determination of dispersity, structural order or evaluation of binding constants. I will demonstrate how molecular self-assembly enables the design of adaptive and responsive nanomaterials and report on the implementation of our principles towards the detection of disease biomarkers and therapeutic drug monitoring in paediatric cancer.

