NIS COLLOQUIUM ITACA Ion-beam Techniques Applied to Cultural heritage and Advanced materials







Jan Meijer

University of Leipzig



Jan Mieter is director of the Felix-Bloch Institute and head of the Department of Applied Quantum Systems at the University of Leipzig. The main focus of the applied quantum systems (AQS) department is the deterministic implantation and assembling of single ions for the fabrication of quantum devices by functionalization of single atoms in a solid state material like diamond. We fabricate the first entangled quantum system based on NV centers at room temperature using ion implantation. These systems can also act as a sensor with atom size lateral resolution. Beside ion implantation, the group is specialized in the

production of defects using ion beams as well as nuclear analytics with high lateral resolution.