

HiLASE Centre is pleased to invite you to attend the seminar

Fluoride Crystals: High Performance Materials for Photonic Devices

Alberto Sottile

Dipartimento di Fisica, Università di Pisa, Pisa, Italy
NEST, Istituto Nanoscienze – CNR, Pisa, Italy

Among all the monocrystalline solid hosts, fluoride crystals have shown several peculiar properties over the years, including low phonon energies and wide transparency windows, which make them ideal for innovative photonic devices, targeting various applications in research and in industry. Our laboratories in Pisa are dedicated to design, grow, and characterize high-quality fluoride materials, a task that we have perfected in the last thirty years, achieving multiple noteworthy results. Currently, we employ two complementary growth methods: the Czochralski and the micro-pulling-down. This seminar will introduce these two methods and the custom-made furnaces that we built in our facility. It will also provide a description of the tasks performed during the growth of a high-quality fluoride single crystal. For each growth method, several pictures of novel grown crystals will be presented, together with appealing scientific results that we have achieved by investigating them in our experiments.

When: Wednesday, **13/09/2017 at 10:00 AM**

Where: seminar room, HiLASE Centre