

BENEFICIARY OF MEDEA

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Now Spectra Physics Vienna

SCIENTISTS IN CHARGE:

- **PD Dr. Andreas Assion**

SCIENTIFIC EXPERTISE & FACILITIES:

- **More than 850 systems, in over 30 countries**
- **State of the art production and R&D facilities**
- **Application lab**
- **Expertise in:**
 - Ultrafast optics and ultrafast measurement techniques
 - Few-cycle oscillators and ultrafast Ti-sapphire amplifiers
 - CEP Stabilization and hollow-core fiber compression Techniques
 - High contrast amplifiers





EARLY STAGE RESEARCHER

Mikayel Musheghyan

PROJECT: *Generation of Mid-IR CEP-stabilized Pulses (Workpackage 3)*

The research program will focus on the investigation of novel approaches for achieving few-cycle CEP-stable pulses in mid-infrared wavelength region. Tests of combining the titanium-sapphire and OPCPA technologies will be carried out. An ultra broadband sub-15 fs amplifier will be developed, after which it will be used for pumping and seeding the OPA system, which, in its turn, will produce the CEP-stabilized mid-IR pulses. Mid-IR pulse characterization equipment (namely, f-to-2f interferometer) will also be developed.

The project will be conducted in collaboration with the groups at **Politecnico di Milano** (Prof. S. Stagira) and **CEA** (Dr. T. Ruchon).