

### **XRP3-1: Frontend of Mid-Infrared OPCPA for Soft X-ray High Harmonic Generation**

Principal Investigator: Assoc Prof Wang Qijie

The key objective of this project is to develop a laser system with signal wavelength at  $3\mu\text{m}$  and above. Optical parametric chirped-pulse amplification (OPCPA) scheme is to be adopted to generate the high-power ultrafast laser pulses. A number of research issues are to be explored, including octave signal white light generation, pump laser synchronization, high-power ultrafast pump source generation, and chirp compensation. The project is in collaboration with SIMTech ASTAR.