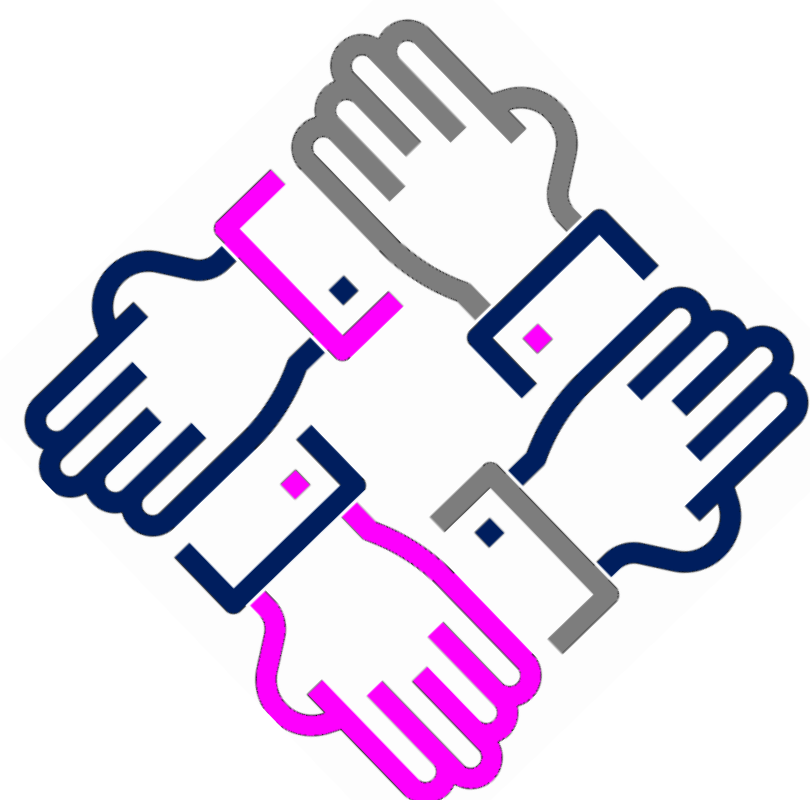




A European Training Network for Terahertz Photonics for Communications, Space, Security, Radio-Astronomy, and Material Science

Strong Network



- 4 Universities
- 2 research institutes
- 3 SMEs
- 2 large enterprises

Global Partners



15 diverse associated partners in Europe, Asia and North America

~4M€ Budgeted



to train 15 innovative and entrepreneurial researchers

TERAOPTICS will enable the next generation of photonic driven THz technology and train the next generation of researchers in this key technology area

Challenge 1: Fundamental limits for optical-to-THz power conversion, frequency tunability and phase stability

5 Key Research Challenges

Challenge 5: Development of integrated THz photonic solutions and fundamental investigations on the processing in the optical and THz domain



Challenge 2: Scalable coherent arrays of photonics emitters/detectors to enable the synthesis of directional controlled high power multi-frequency THz signals

Challenge 4: How to design (meta)materials to approach fundamental limits on functionality for THz components?

Challenge 3: Fundamental limits to optically mediated THz mixing and detection

