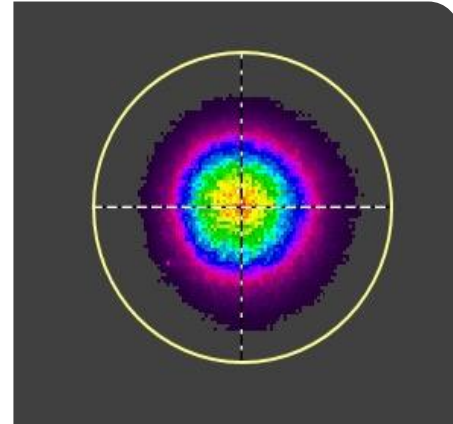
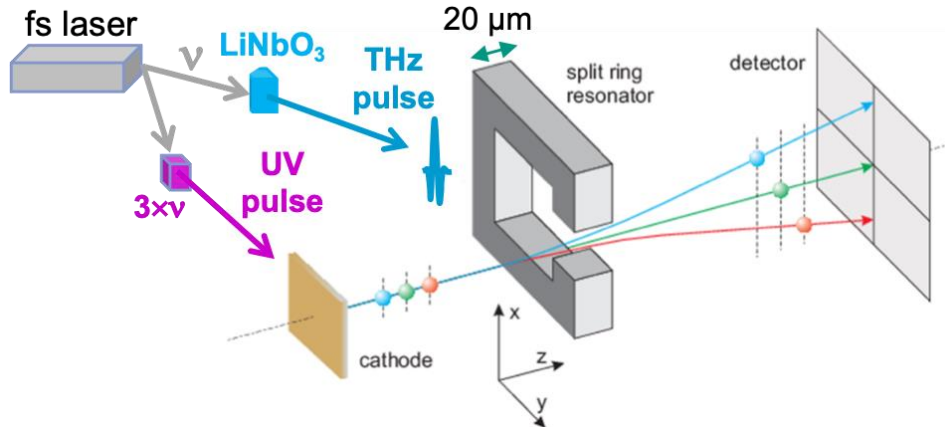
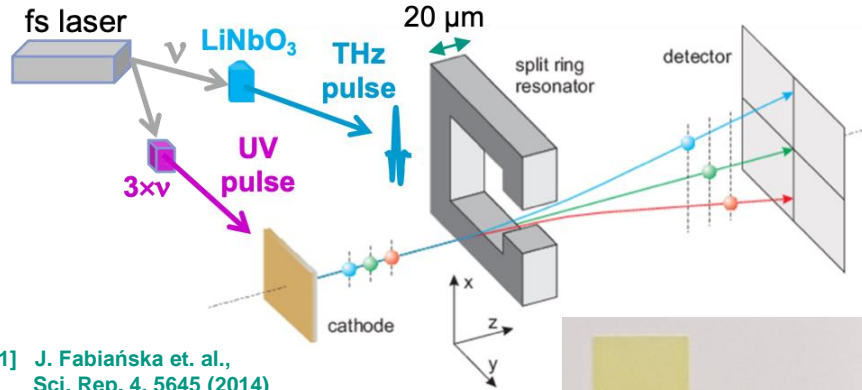


The split ring resonator experiment at FLUTE

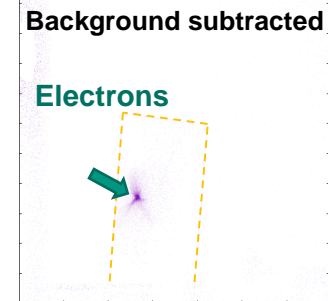
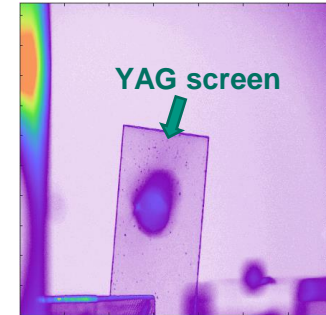
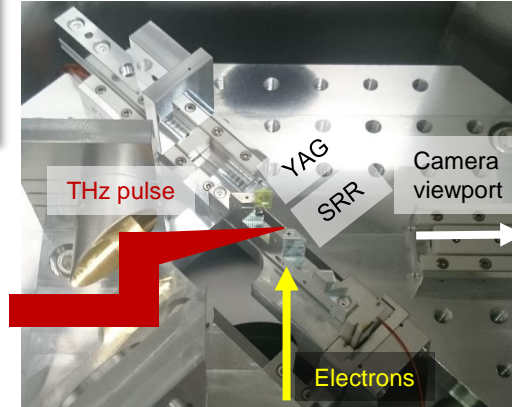
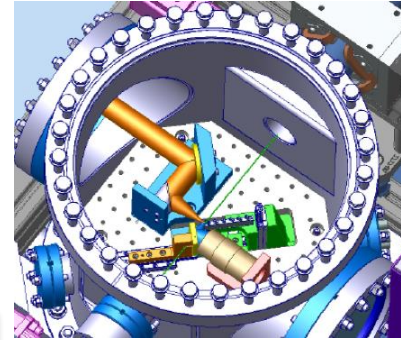
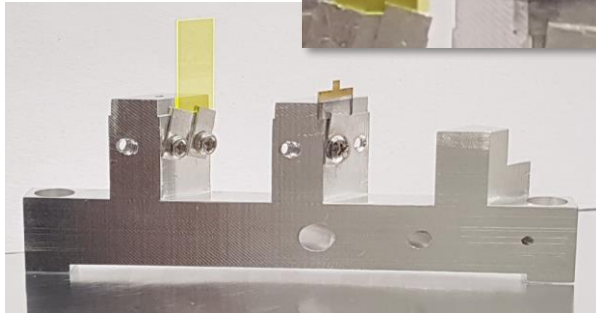
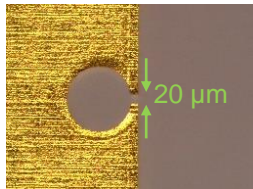
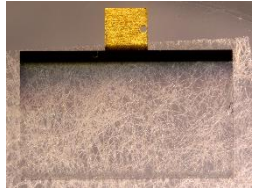
M.J. Nasse, M. Nabinger, T. Schmelzer, N. Smale, R. Ruprecht, E. Bründermann, A.-S. Müller, R. Ischebeck, M. Dehler, V. Schlott, Z. Ollmann, M. Hayati, T. Feuerer



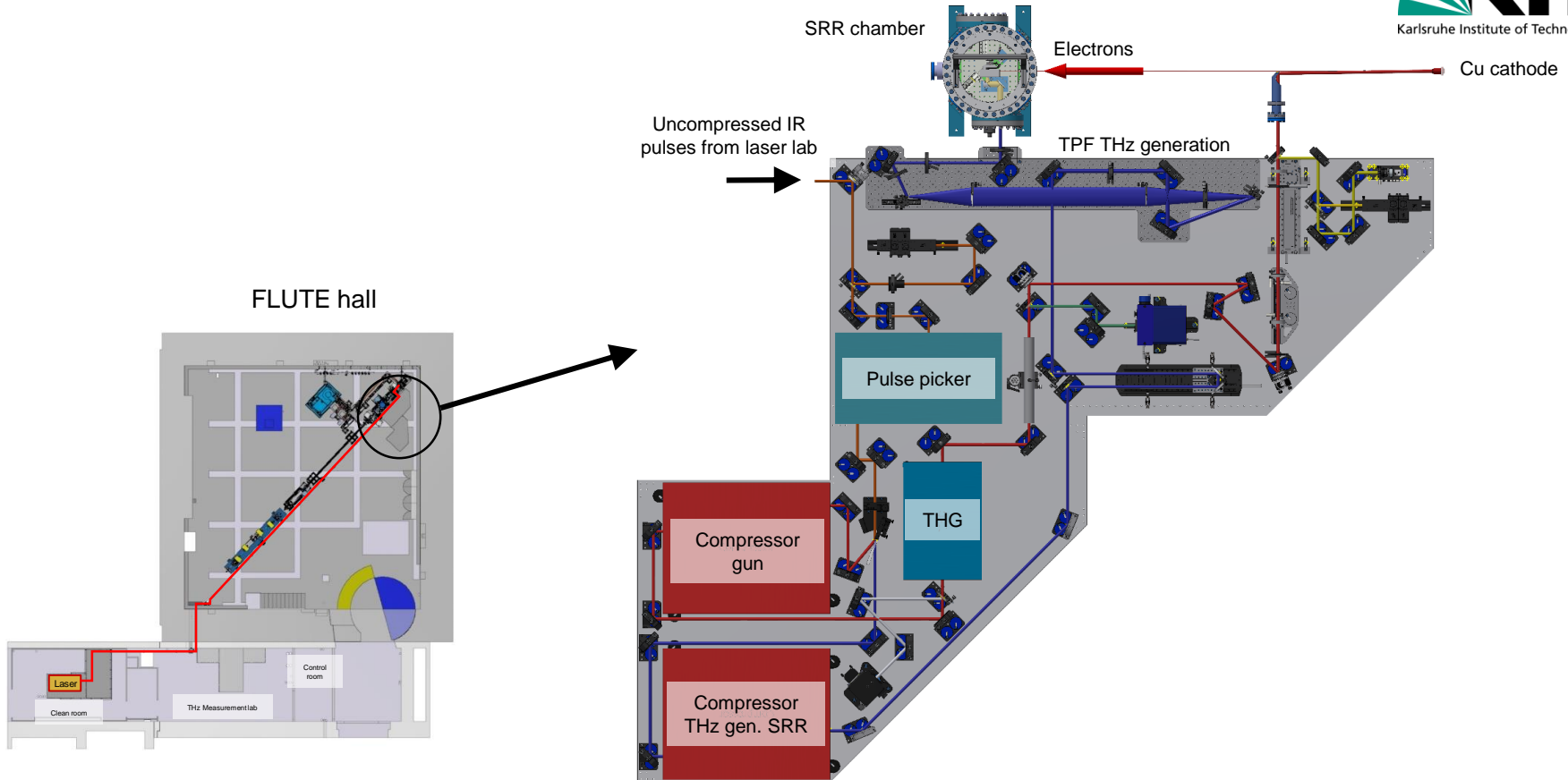
THz streaking using a split ring resonator (SRR)



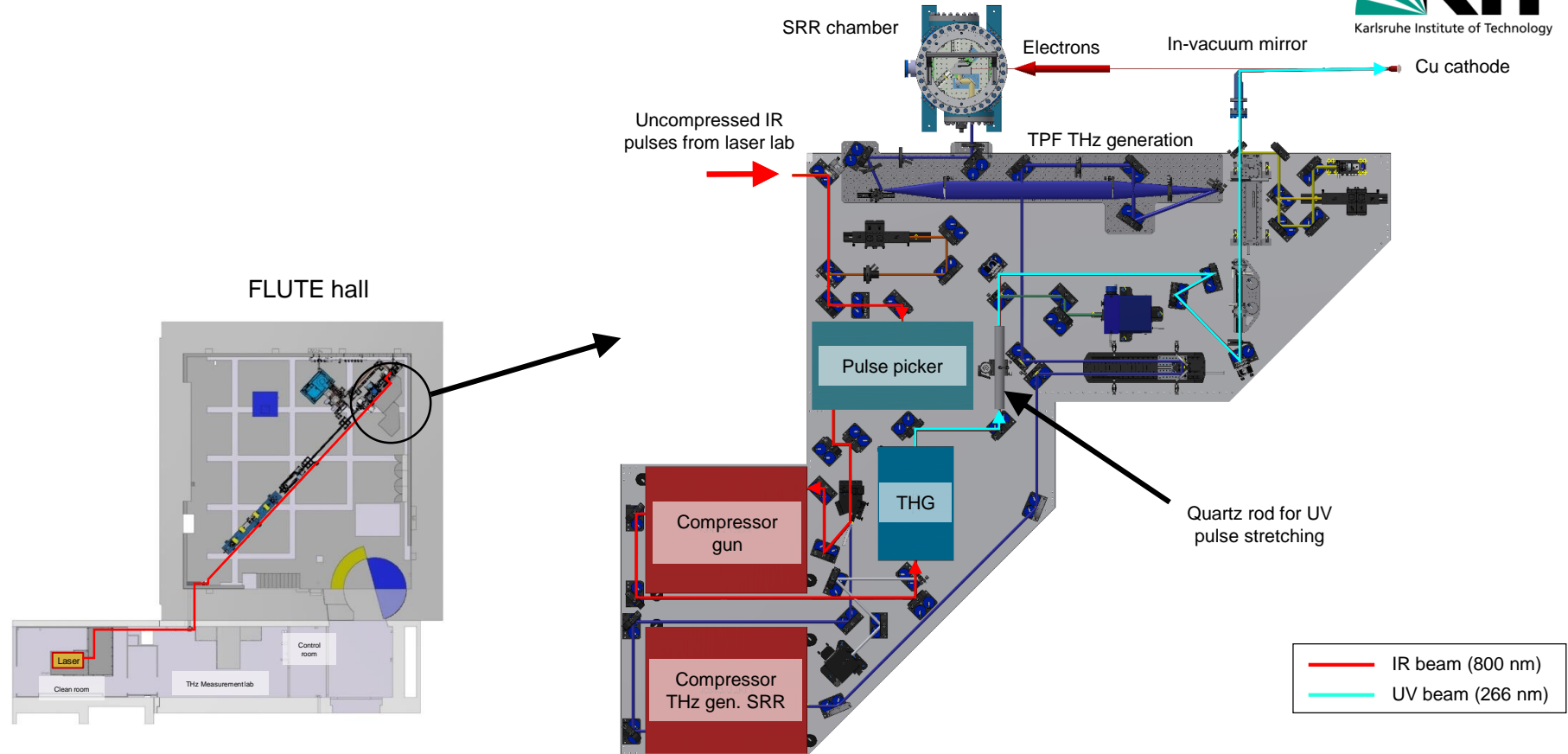
- [1] J. Fabiańska et. al.,
Sci. Rep. 4, 5645 (2014)
- [2] M. Yan et. al., IPAC'16, TUPG56 (2016)



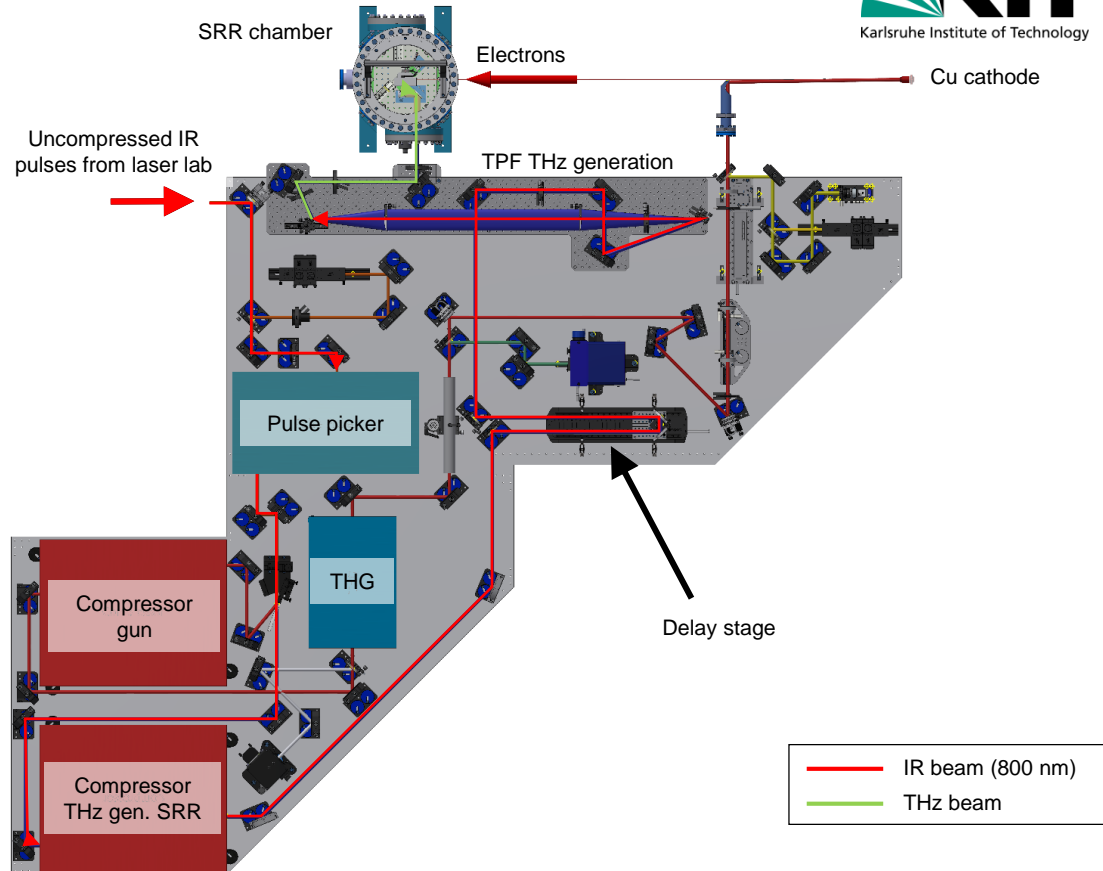
Overview photoinjector & SRR laser system



Photoinjector: UV beam generation

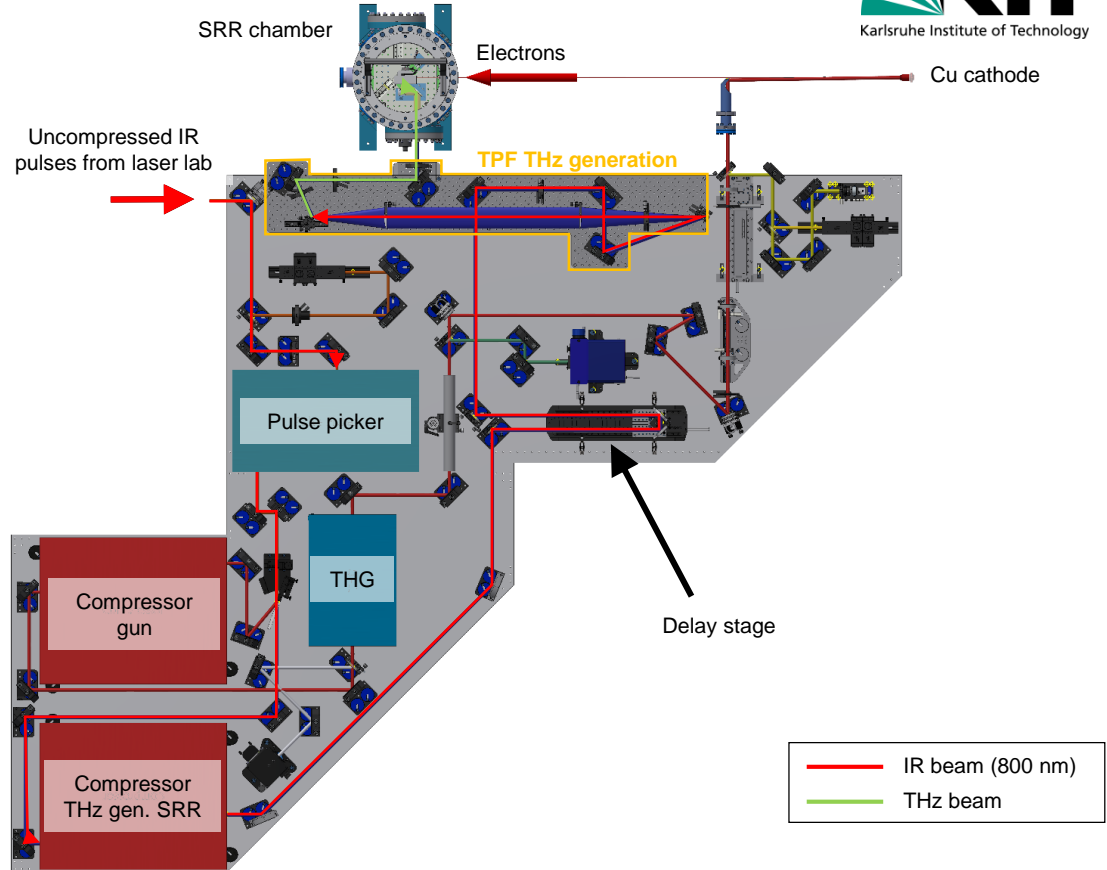
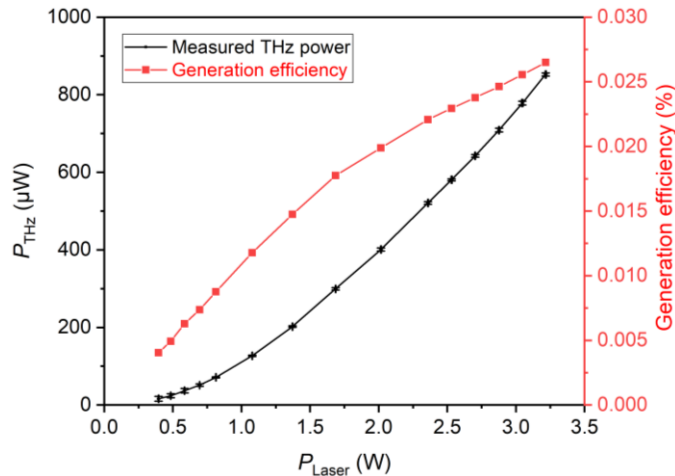
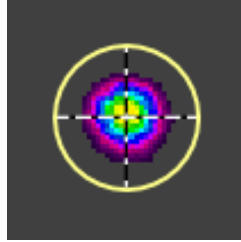
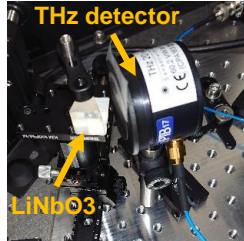


Split ring resonator: THz beam generation



Split ring resonator: THz beam generation

Tilted pulse front technique



Status split ring resonator experiment

- Optics for photoinjector & SRR experiment set up and working
- High THz generation efficiency reached (up to $\sim 0.03\%$)
- Laser diagnostics needs to be aligned and commissioned
- Temporal and spatial overlap needs to be established

