Liquid Optical Circuits
The seminar will be given in English

Spherical optical resonators attract a lot of interest, especially because of it’s similar in nature to hydrogen atom mathematical model. That’s why they also addressed sometimes as photonic atoms, and number of them put together as photonic molecules. We design, fabricate and experimentally demonstrate collective whispering gallery modes (WGM) of coupled liquid-liquid optical micro resonators, controlled and arranged by optical tweezers into different optical circuits (photonic molecules). Liquid-core liquid-clad microcavity coupled simultaneously to a standard tapered fiber and to another one or two similar optical resonators. During the experiment we map the WGM of various configurations, observe and collect the system response to different wavelengths inputs. Our method is scalable to circuits composed of multiple devices.