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## **SERBIA PHOTONICS: COMPANY OVERVIEW WITH EMPHASIS ON OPTICAL GROUND STATIONS**

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### **ABSTRACT**

In this talk we will give a short overview of company, founders vision, departmental division with emphasis on several key aspects.

First to be presented is our Astro Instrumentation department and its capabilities of simulation, design and manufacture of advanced astronomical instruments and collaboration with our partners which codesign with us custom made EMCCD, holographic dispersive elements, specialty fiber feeds, astrocombs, photonic calibrators etc.

Secondly, our Laser Communication department will be presented with expertise in developing and deploying laser free space communication (FSC) and laser ground to space communication (LGSC) technology with heavy emphasis in design and simulation of high finesse optical cavities for modal beam filtering and a complementary technology for modal deconvolution based on interferometric phase plates.

Special time and attention will be given to the Optical Ground Stations (OGS) for which we have expertise in developing subsystems and test fielding them together with our partners and case made for necessity for developing the Serbian OGS network. Most suitable geo-meteorological place with infrastructure availability will be advocated for.