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Optical Trapping in Novel Geometries

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Oral Presentation O3.1

OPTICAL TRAPPING IN NOVEL GEOMETRIES

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Optical forces are being used in novel applications that span from cell sorting to studying the physical principles of DNA to alleviating the bottleneck in the internet. We describe the design and calibration of a flexible optical trapping set-up, which will allow us to compare the absolute magnitude of forces in conventional and non-conventional optical geometries. In particular, we discuss the interaction of micro-particles with conventional optical tweezers and with three-dimensional optical lattices.