



Optics and Photonics Group Lunchtime Seminar "Micromechanical sensing inside and outside cells" Dr Tania Mendonca Optics and Photonics Group



13:30 Wednesday 23 November 2022 C24 Coates Building All Welcome

http: //optics.eee.nottingham.ac.uk/wiki/Seminars_2022-2023



"Micromechanical sensing inside and outside cells"

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I'll be talking about a couple of projects I have been involved in over the last few years combining 3D imaging with microrheology, including OptoRheo - our multifunctional instrument that integrates light sheet microscopy with optical trapping and multiplane imaging. We show that OptoRheo can record live cellular dynamics while at the same time monitoring changes in extra-cellular matrix viscoelasticity to help answer fundamental questions in cancer biology. More recently, I've been applying some of these microrheology approaches to study chromosome structure and organisation during cell division.