

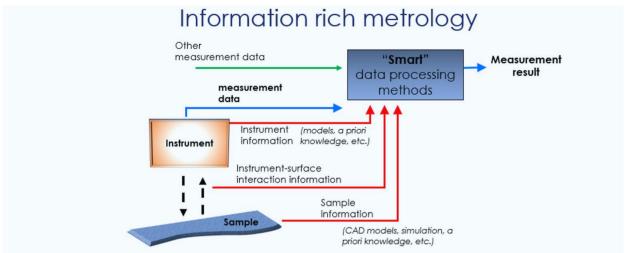


## Optics and Photonics Group Lunchtime Seminar

## "Manufacturing metrology research: optical metrology for digital manufacturing"

Dr Ulises Hernandez Ledezma

Manufacturing Metrology Team



Adapted from: Senin N and Leach R 2018 Information-rich surface metrology *Procedia CIRP* 75 19–26

13:30 Wednesday 26 October 2022 C24 Coates building All Welcome



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## "Manufacturing metrology research: optical metrology for digital manufacturing"

Dr Ulises Hernandez Ledezma 13:30 Wednesday 26 October 2022 C24 Coates building All Welcome MS Teams link

In this talk, we will introduce some of the research activities conducted by the Manufacturing Metrology Team (MMT) at the University of Nottingham. We will start by explaining the role of optical metrology in digital manufacturing and the current metrology challenges in Industry 4.0. We will also present the current laboratory facilities available in the MMT and explain the research activities of the Midlands Centre for Data-Driven Metrology. Finally, we will also discuss industrially-focussed research performed in direct collaboration with small and medium enterprises, and cover recent progress in the development of a demonstrator for advanced optical measurement.

Dr Ulises Hernandez is Research and Engagement Fellow in the Midlands Centre for Data-Driven Metrology at the University of Nottingham and his responsibilities include the engagement with SMEs, deliver short research projects and showcase the research capabilities of the Manufacturing Metrology research group. He obtained a PhD in Electrical and Electronic Engineering from the University of Nottingham and recently completed a senior leader master degree program underpinned by an executive MBA at Nottingham Trent University. Ulises studied a MSc in optical-mechatronics, a BSc in Physics and he has worked as R&D engineer in the industry for 3 years. His R&D work has demonstrated the practical applications of optical fibre technology in the fields of sports, healthcare and now he is exploring their applications into optical metrology and the digital manufacturing sector.âĂŃ