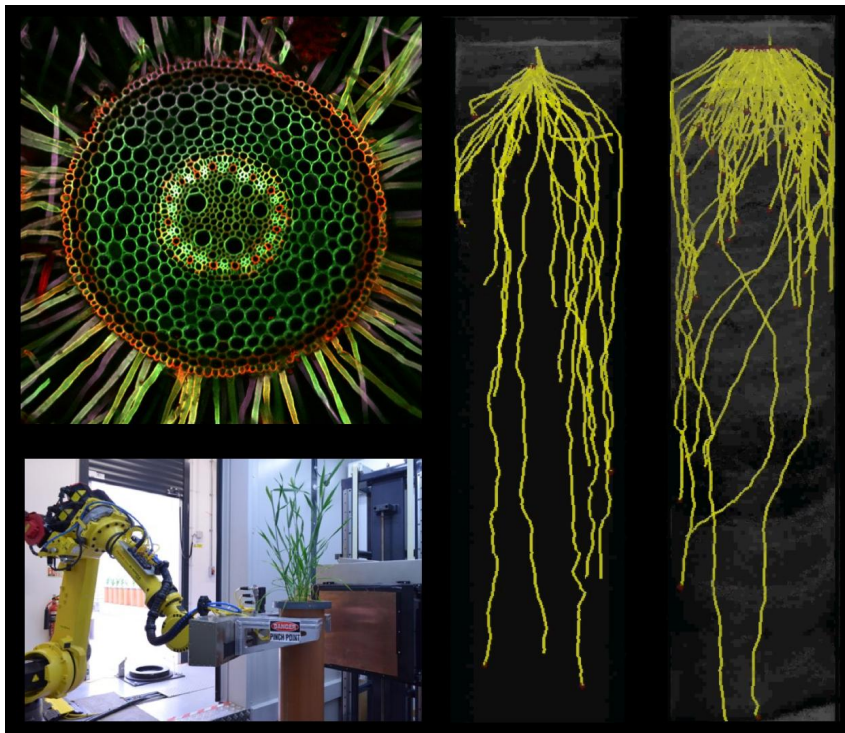


Optics and Photonics Group Lunchtime Seminar

“Technologies in plant phenotyping - utilising X-ray CT for the study of plant roots”

Jon Atkinson

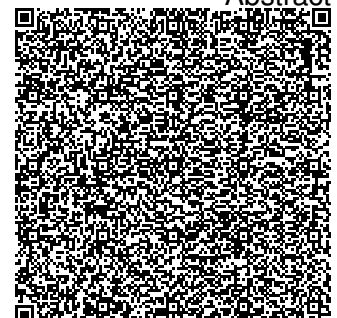
The Centre for Plant Integrative Biology, University of Nottingham



1:00pm Thursday 30th November 2017
203 Tower Building
All Welcome

http://optics.nottingham.ac.uk/wiki/Talks_2017

Abstract



“Technologies in plant phenotyping - utilising X-ray CT for the study of plant roots”

Jon Atkinson

1:00pm Thursday 30th November 2017

203 Tower Building

All Welcome

Plant phenotyping is the study of a plants observable traits, characteristics and physiological responses to stimuli. This discipline is a growing research area focused on identifying new (or existing) crop varieties with the ability to meet ever increasing yield demands associated with a burgeoning global population and changes in international diets. Coupled with decreases in arable land and climate change, plant scientists face pressure to rapidly screen, identify and select crops with desirable phenotypes; plants which can not only survive under changing environmental conditions but also produce higher yields.

While phenotyping above ground plant material is common in plant science, the study of the root phenotype has gathered more interest in recent years. Roots are hard to study; with observation and removal often damaging the plant or creating bias in results. In this talk, I will discuss some of the current technologies used in plant root phenotyping, with a particular focus on x-ray CT and the Hounsfield facility based at the University of Nottingham's Sutton Bonington Campus.