



HARRY PERKINS INSTITUTE
OF MEDICAL RESEARCH



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PERKINS Seminar Series

Special Perkins Seminar

FRIDAY 2 DECEMBER



Dr Irina Kabakova

Physics Department, Imperial College London

"Brillouin imaging for micromechanical characterisation of biomaterials"

Dr Irina Kabakova is a Junior Research Fellow working at the Physics Department, Imperial College London. Irina obtained her PhD from the University of Sydney for her work in nonlinear all-optical signal processing. Then she joined Nonlinear Phononics group at Sydney University and worked on the development of novel light sources using the process of stimulated Brillouin scattering. Later she worked at AMOLF Institute in Amsterdam on a project related to near-field imaging of plasmonic nanostructures. Her current research interests are focused on the development of endoscopic Brillouin imaging technique and its applications to stiffness measurements of tissues and biomaterial.

"Brillouin imaging has recently emerged as a powerful technique for characterisation of mechanical properties in tissues, cells and biomaterial. It exploits inelastic scattering of light by acoustic vibrations and maps the tissue stiffness point by point with micron resolution. In this presentation I will introduce the idea of Brillouin endoscopy that is a route for in vivo and in situ micromechanical characterisation of biomaterial. I also discuss applications of Brillouin imaging to biophysics, bioengineering and material science applications."

12:00noon till 1:00pm

For more information please contact Dr Brendan Kennedy

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MCCUSKER AUDITORIUM, HARRY PERKINS INSTITUTE OF MEDICAL RESEARCH, NORTH CAMPUS

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Your Guide to the



HARRY PERKINS INSTITUTE OF MEDICAL RESEARCH

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Campbell St

Kingston St

Verdun St

Caladente Cres

Caladente Cres

Hempden Rd

Geirdehr Dr

Hospital Ave

Winthrop Ave

Kings Park

Child Care

Under Construction

Under Construction

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PathWest

Western Power Sub Station

Staff Car Park 3

Hollywood Private Hospital

Under Construction

Lions Eye Inst

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Staff Car Park 4

HARRY PERKINS INSTITUTE

Visitor Car Park 3A

Staff Car Park 7B

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Car Park 7A

Staff Car Park 7A

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UWA Car Park

X

Emergency Helipad

Visitor Car Park 1

Visitor and Staff Multi Deck Car Park (Entry off Winthrop Ave Only)

To Harry Perkins

Main Entrance

Multi Deck Car Park Phase 2

Main Entrance & Admissions

EMERGENCY

Under Construction (New Children's Hospital)

To Stirling Hwy

