

Moseley Medal

Dr Jacopo Bertolotti | UNIVERSITY OF EXETER

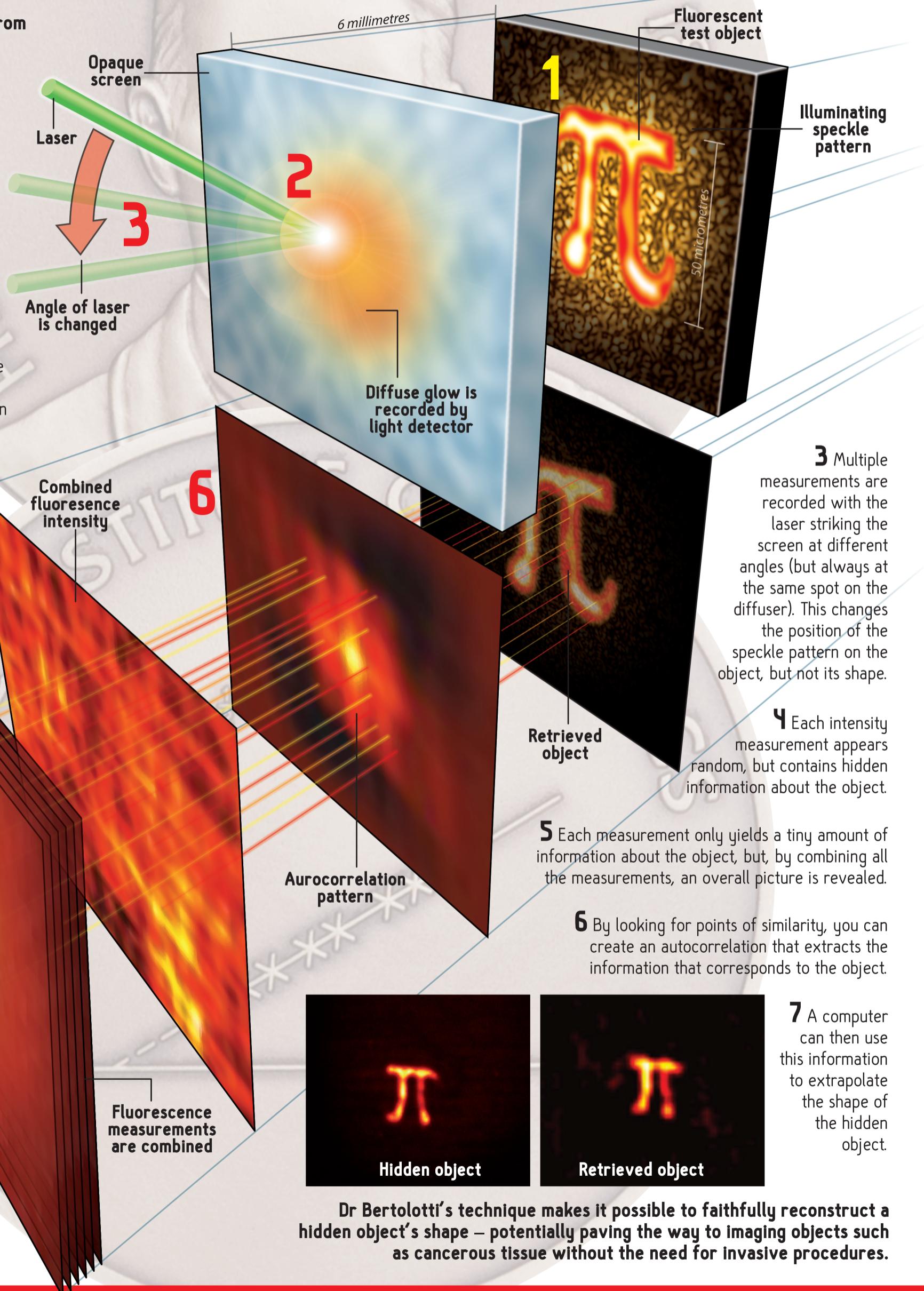
For his contributions to the understanding and exploitation of light scattering both in natural and in artificial materials.



LOOKING THROUGH AN OPAQUE MATERIAL

Light scattering prevents us from seeing objects hidden behind opaque materials, but some information about that object survives within the scattered light.

Dr Bertolotti's technique allows an image of the hidden object to be extracted from this scattered light – enabling us to look through opaque materials, such as biological tissues.



2 A laser beam is used to illuminate the object through the screen. When the light passes through the screen, the object is illuminated by a speckle pattern. This creates a diffuse glow of scattered light, which is recorded by a light detector.