

Gerald S Buller, Professor of Physics



Gerald Buller researches time-correlated photon-counting detection and applications. The group is pursuing research in semiconductor-based single-photon counting detectors, especially at wavelengths $> 1000\text{nm}$, these include InGaAs/InP and SiGe avalanche diode detectors, as well as other narrow-gap III-V semiconductors for longer wavelengths (ie $> 2000\text{nm}$). The photon-counting applications studied include time-resolved photoluminescence, photon-counting time-of-flight depth imaging, GHz-clocked quantum key distribution and quantum/ghost imaging. Professor Buller is also a Director of Helia Photonics Ltd. of Livingston, Scotland (www.helia-photonics.com).

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<http://www.phy.hw.ac.uk/resrev/photoncounting>

Work Groups

Biophotonics	<input checked="" type="checkbox"/>
Integrated Photonics	<input checked="" type="checkbox"/>
Solar Cell Devices	<input type="checkbox"/>
Solid State laser Engineering	<input type="checkbox"/>
Photonic Sensors	<input checked="" type="checkbox"/>