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**Towards ultrafast imaging and spectroscopy in the water window**

XFELs have provided a billionfold increase in peak brightness of readily tunable x-ray pulses, immediately creating the field of nonlinear x-ray science where multiphoton effects dominate. In this talk I will discuss how these ultraintense pulses can be harnessed for ultrafast imaging and spectroscopy, with an emphasis on applications in the water window.