



Experimental setup for femtosecond x-ray scattering studies. The UV pump pulse (blue) excites a gas sample in the reservoir (green). The x-ray probe pulse (red) creates frames for a “molecular movie” on an imaging detector. Selected for an Editor’s Suggestion and for a Viewpoint in *Physics*. [M. P. Minitti *et al.*, Phys. Rev. Lett. **114**, 255501 (2015)]

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