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Operando Beamline for Solar Cell Characterization under Proton Irradiation

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Since the observation of the radiation hardness of Perovskite-semiconductors compared to traditional semiconductors, the interest in Perovskite solar cells for space applications increased tremendously. First tests on the radiation hardness of Perovskite multi junction solar cells support this. However, further experiments with highly efficient Perovskite tandem and triple cells are necessary.

For this purpose, a unique inOperando beamline is built, where new solar cell technologies can be characterized before, during and after proton irradiation with parallel illumination by an AM0sun simulator. Combined with in-situ photoluminescence this will increase the physical understanding and allow technological progress of solar cells.

Speed talk:

I am unwilling/unable to present a speed talk

Author: DENKER, Andrea (Helmholtz-Zentrum Berlin)

Co-authors: DITTWALD, Alina; KARABULUT, Dilara; KOURKAFAS, Georgios; BUNDESMANN, Jürgen

Presenter: DENKER, Andrea (Helmholtz-Zentrum Berlin)

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