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Neutron depth profiling, present day applications in Lithium ion batteries

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First used to measure Boron impurities in silicon wafers, neutron depth profiling has recently gained renewed attention as a non-destructive method for studying of lithium concentration variations along the electrode depth in lithium ion batteries. The presenter will demonstrate application to the high power density and environmentally benign cathode material LiFePO4. The results obtained, both in operando as well as ex-situ, provide important insight for electrode design and inspire the development of novel computational methods.

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