

- [05185] Early prediction of battery remaining useful life using AI and physics
 - **Format** : Online Talk on Zoom
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 - **Abstract** : Accurate prediction of the remaining useful life (RUL) of a lithium-ion battery (LIB) using early cycle data aids in scheduling predictive maintenance, avoiding catastrophic failure during operation and optimizing battery manufacturing. In this talk, we discuss our recent work in building a hybrid deep learning model that combines physics-informed features with statistical features to achieve better generalization performance in early RUL prediction when benchmarked against several AI models. If time permits, we will also discuss our recent parametric study of LIB capacity fade using a cell OCV model.