Charging a li ion efficiently with a single-inductor battery-charging voltage regulator

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ABSTRACT
Charging batteries in cell phones and other small electrics with other batteries (in battery banks or laptops) is increasingly normal these days. Volume and charging efficiency are critical in this space because both, source and load, lose energy they need and cannot recover. Charging batteries in a way that maxes their efficiency is therefore as important as transferring energy with efficiency. This research seminar shows how li ions respond to different charge profiles and how a single switched inductor can charge a li ion efficiently while at the same time supplying a load with a steady supply voltage.

Friday, July 22, 2022 at 1:00 – 2:00 p.m.
Osborne Conference Room (ECSS 3.503)