News of the week (week 4)

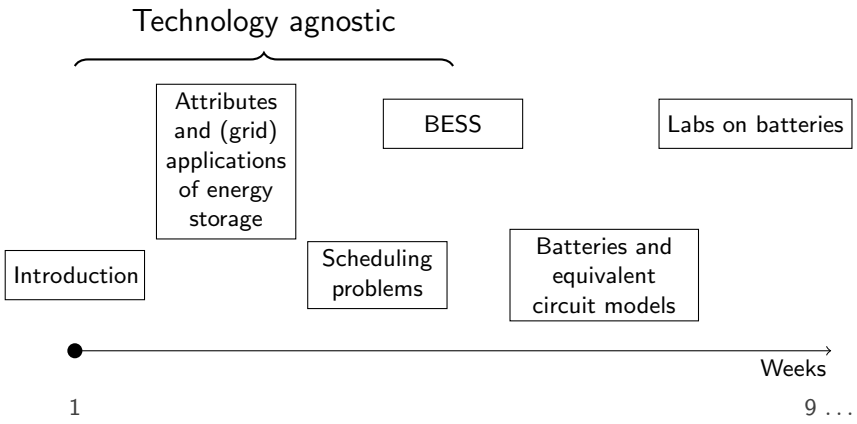
- Today's (main) topic: Battery Energy Storage Systems (BESSs)
- Program of the day:
  - 13:15: Discussion on last week exercises
  - 13:30: BESSs: what they are and what are their components
  - 14:00: pause
  - 14:15: BESSs (continuation)
  - 15:00: We walk to ELL
  - 15:10: Visit to the BESS of EPFL
  - Approx. 15:45: Over
- Solutions to the exercises of last week will be uploaded on Moodle by the end of the day.
- Week 5 (next week): guest lecturer from ALPIQ.

News of the week (week 4): where are we?

1. 12 Sep (W1): Introduction to course and simple SOE/SOC models + exercises
2. 19 Sep (W2): Energy storage attributes and energy storage applications + exercises
3. 26 Sep (W3): Scheduling energy storage operations (on video) + coding exercises
4. $\longrightarrow$ 03 Oct (W4): Battery energy storage systems (BESS) + visit to the BESS of EPFL
5. 10 Oct (W5): Guest lecture (presenter from ALPIQ)
6. 17 Oct (W6): Battery equivalent circuit models
7. 24 Oct (W7): Holiday week
8. 31 Oct (W8): Battery Management Systems (BMS)
9. 07 Nov (W9): Laboratory 1: model identification of battery cells (**4 hours** - we might be faster)
10. 14 Nov (W10): Laboratory 2: state-of-charge estimators (**4 hours** - we might be faster)
11. 21 Nov (W11): Hydropower and Pumped-Storage Hydropower (PSH)
12. 28 Nov (W12): Independent work
13. 05 Dec (W13): Presentations day
14. 13 Dec (W14): Reserve day

News of the week (week 4): where are we? (cont'd)

We continue in our top-down journey, from general to specific technologies:



Diving into technological details will help you to understand modeling approximations performed in simple energy storage models and

News of the week (week 4): Yo, cool man, but what's up in the final exam?

If he were among us, that's what he might ask.

- Applying the state of energy models (ideal and non-ideal) seen so far
- Enunciating the formulation of a scheduling problem for energy storage systems
- (reasonably) guessing the solution of a scheduling problem
- Qualitative information (eg, attributes of energy storage, applications)
- Notions that will come.