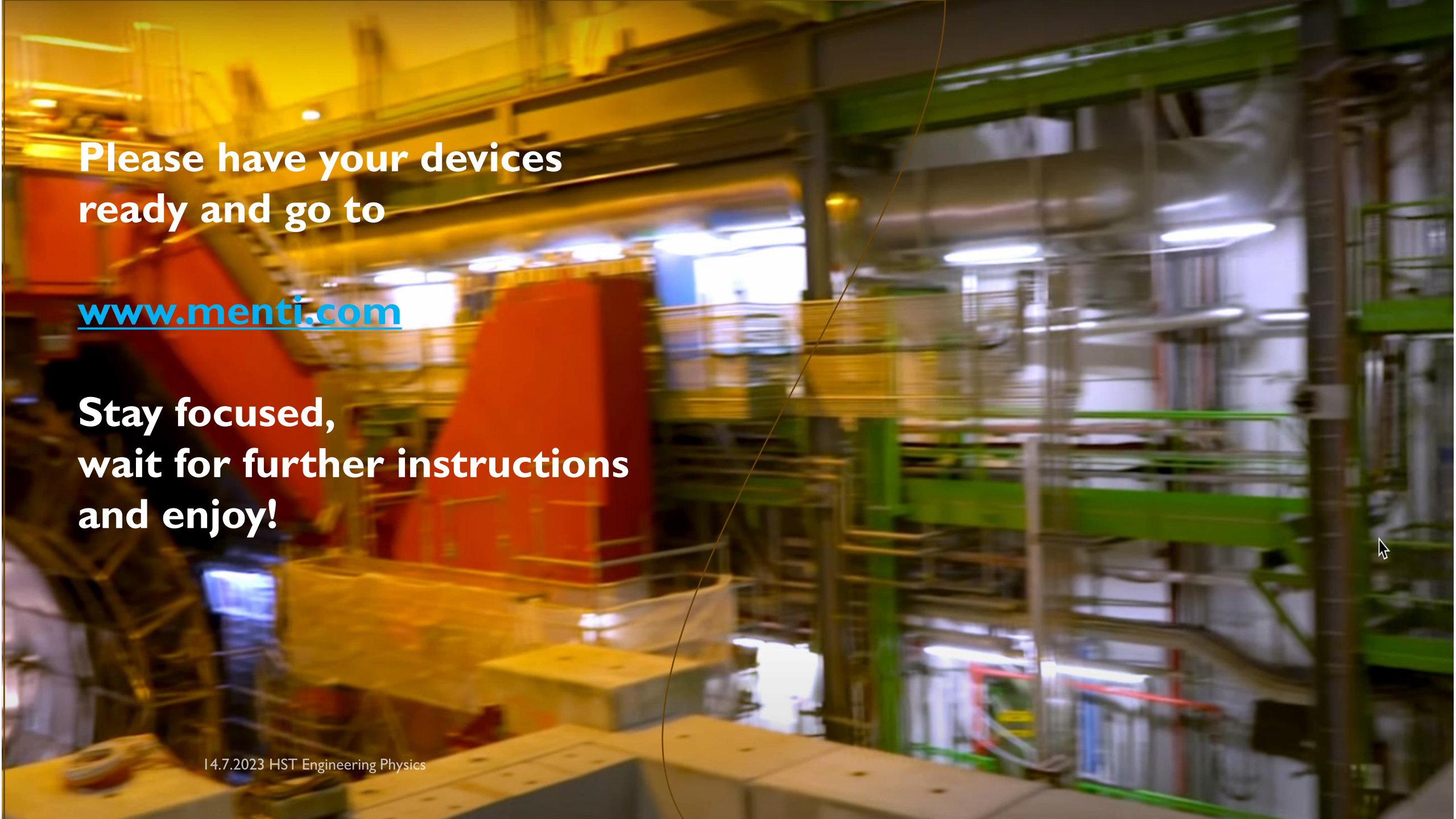
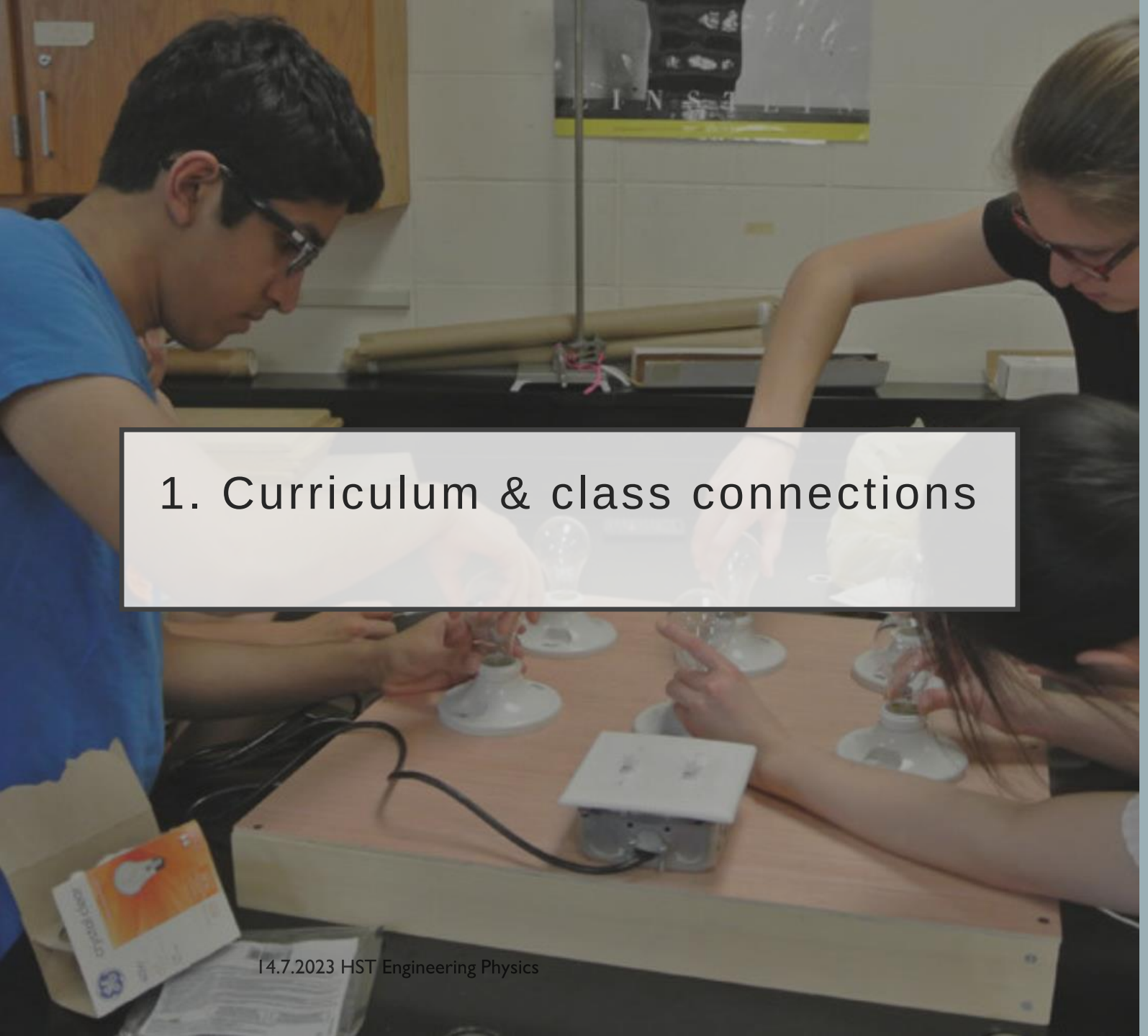

Please have your devices
ready and go to
www.menti.com
Stay focused,
wait for further instructions
and enjoy!

THIS SCIENTIEST IN FRONT OF YOU HAPPENS TO BE A VERY FAMOUS PHYSICIST …But she does have a problem…→

Engineering @ CERN

SG 3: Kristina, Janis, Rajesh, Sarah

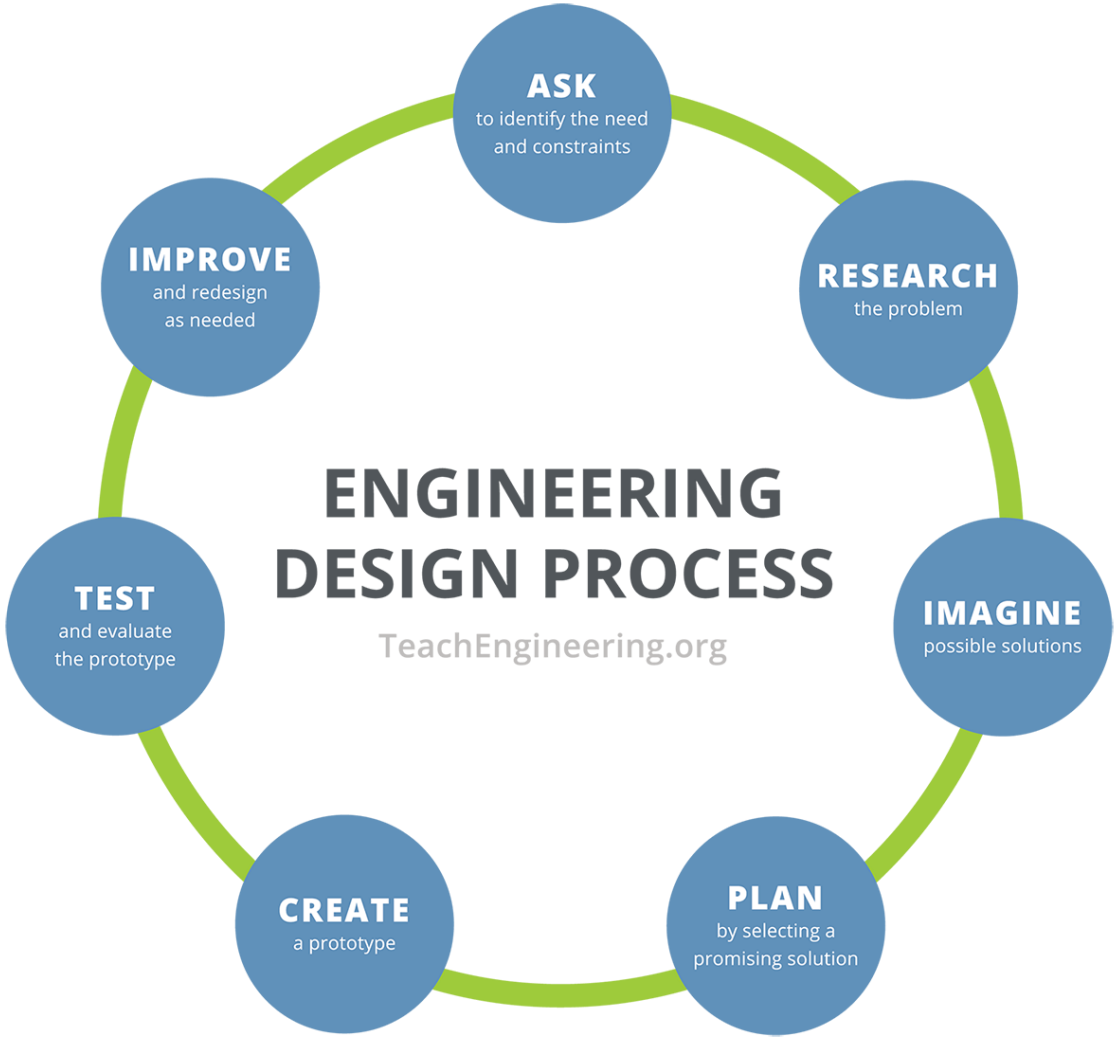
HST 2023



1. Curriculum & class connections

- *Bringing engineering to school through **projects***
- *Practical work in class*
- *CERN includes several **projects***

2. THINKING LIKE ENGINEERS



3. CONCEPTIONS & CHALLENGES

- **CONCEPTIONS**

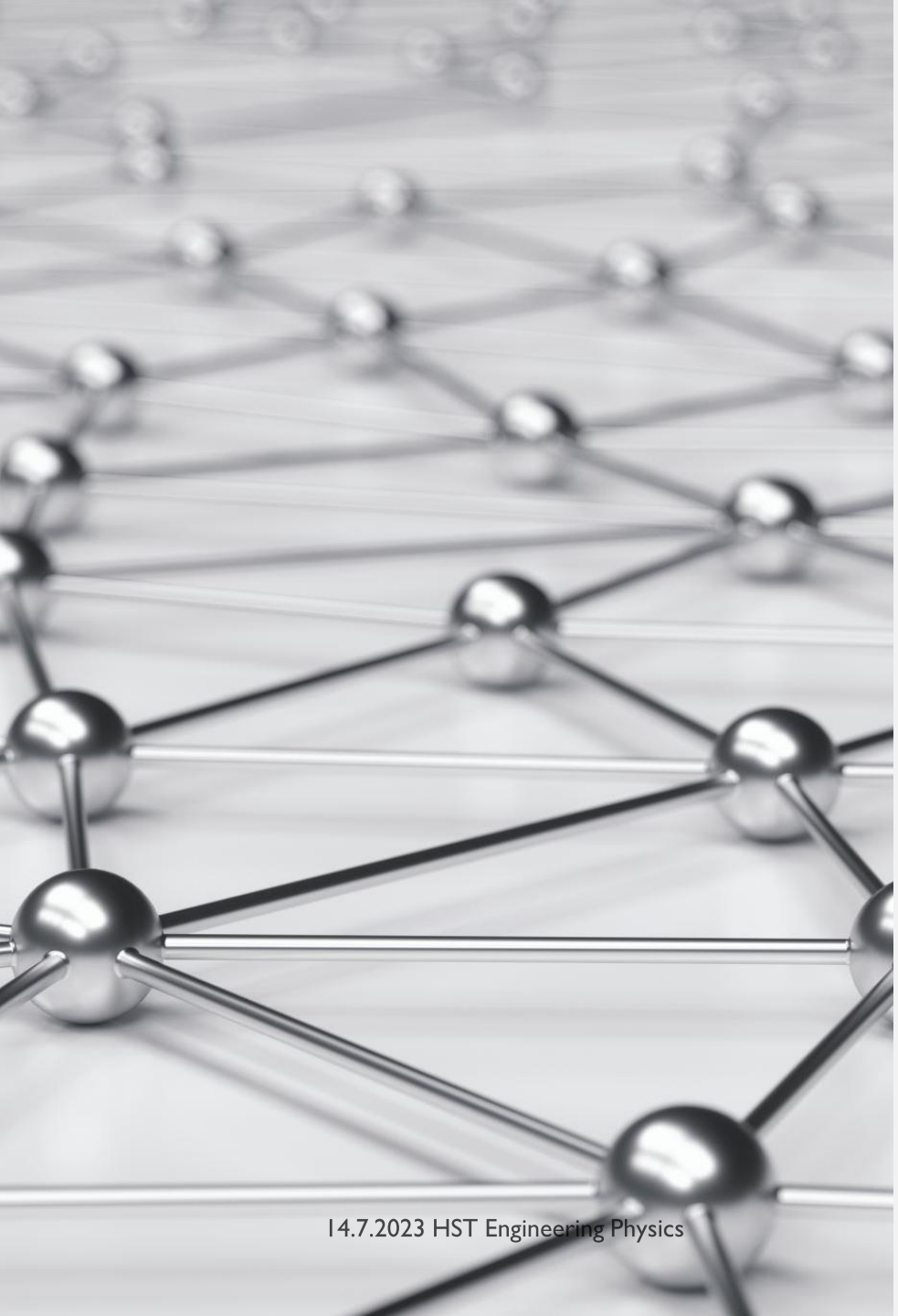
- Planning
- Trial and error method
- Collaboration
- Constant testing
- Improvement
- CERN as an international collaboration

- **CHALLENGE**

-Students may oppose the “learning by doing”
- Time in the classroom
- Material resources available in school

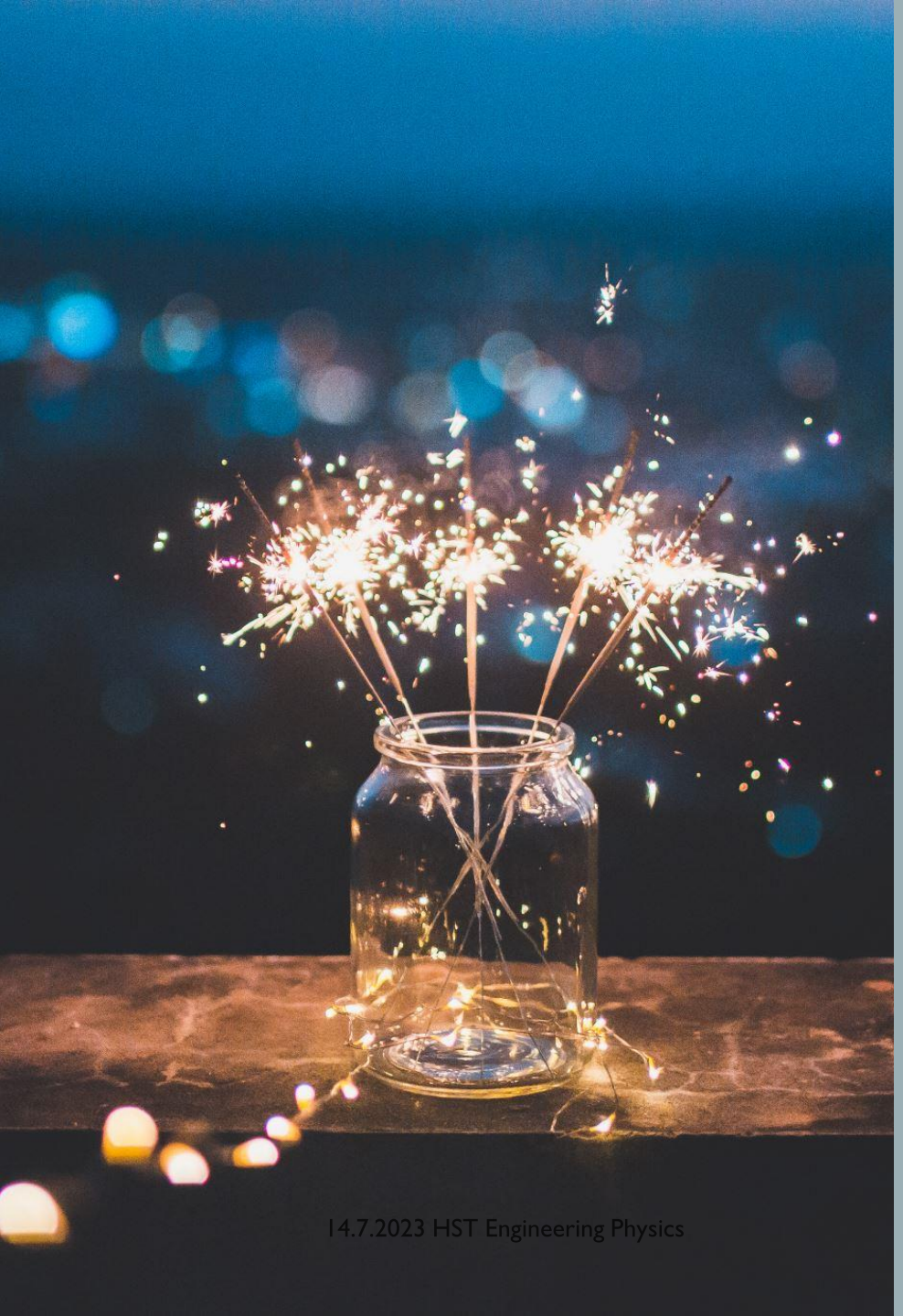
4. Examples of engineering situations to teach at school

- Cooling mechanisms
- Solenoids
- Statics
- Rotation
- Friction
- Cooling of the magnets in LHC
- CMS Solenoid
- Design of dectetors structure
- Vacuum Chamber



5. RESOURCES

- https://www.teachengineering.org/ - web page with ideas and resources for teaching engineering
- https://www.sciencebuddies.org/engineering-challenge - resource for various project challenges and competition



“ARE WE DONE?”

AMAZING🤩🤩🤩