Breakout session on "Labs @ home + the possibility of shared resources?"

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Labs @ home + the possibility of shared resources?

This small group started off by discussing the intended learning outcomes of the courses and whether or not they could be met remotely. It was agreed that skills that couldn't be learned and practiced via a video would need a hands-on element. One participant highlighted aligning optics and wiring electronics as good reasons to bring student on-campus under social distancing guidelines. Whereas another told of us plans to create remote Michelson-Morely kit using mobile phones as the detector. Studying Ray Optics with a Smartphone is also possible – (see https://aapt.scitation.org/doi/full/10.1119/1.5144800?casa_token=pwPhiTXWGLsAAAAA%3AlZ3tDbu3kmHZ76arJ9PcNK-7xYWy8AJHpT1zrynP7ehwchzrOtl9Eqobn1tF2ZMdQJJgX84xFAMF). Cost was discussed as a possible barrier to sending kits out to all students.

One of the key feature in all plans discussed, was the need for a remote or virtual contingency plan should students be unable to reach campus. A pre-publication article about "A pandemic-resilient open-inquiry physical science lab course which leverages the Maker movement" (https://arxiv.org/abs/2006.06881) was recommended.

The group reviewed the possibility of having an open SharePoint space where colleagues could share activity plans or even lab operations. This is what has been set up through the Chemistry network DryLabs. A link to the AAPT advanced labs (https://advlabs.aapt.org/) was shared. This is an established repository of physics activities which could provide a lot of support in redesigning lab courses.

The group discussed the possibility of having a blog for the PHYSICS-LTHE network – this would allow for people to contribute about different topics, as well as labs. It would be possible for people to share plans for operations as well as specific activities. We would need to look for contributors but it was seen as a good feature for the network.