Outreach project: mu_app

Target audience: general public

Tool/delivery: web app with 2 videos and a quiz

Topic: muon anomalous magnetic moment

- First video: who ordered that? Muon in the context of particle physics and early SM, what everything is made of. Discovery of muon, cloud chambers, collider experiments, confining particles with magnets, dark matter and hints of BSM.
- Second video: g-2. Magnetic fields with bar magnet, spin with spinning top. Explain g-factor and how unseen particles influence it. Therefore: measure it! See whether there are unknown particles...
- Videos: corner cards with references and more information
- Quiz: multiple choice, increasing difficulty. Some history questions, some experiments, some particle knowledge. Think Sporcle, Duolingo gamified. Prize: muon t-shirt!

Budget:

Monetary: website hosting, web developer hire 0.5FTE for 2 months+maintenance, filming equipment hire, quiz prize.

People-hours: 0.25FTE for 3 people for 1 year.