# Discussion points

I. **Theory inputs for MC simulations of $\tau \to 3\ell$:**

- Experimental efficiencies can depend on the underlying EFT scenario (cf. e.g. LHCb analysis). How useful/relevant is it to consider different scenarios?

- Would the di-muon mass spectrum information be a useful input for theory (in which format)?

II. **Light resonances:**

- Are the light vector resonances ($V = \rho, \omega, \phi$) included in the MC for $\tau \to 3\ell$ (at the different experiments)?

III. **"Dark" sectors:**

- Can we apply current exp. limits to models with light mediators ($m_X \lesssim 1$ GeV) ? What if there is a displaced vertex in $\tau \to \ell X(\to \ell\ell)$ ?

IV. **Prospects:**

- Can HL-LHC be competitive to Belle-II (with 50 ab$^{-1}$)? Prospects for FCC-ee?

V. **Anything else?**