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# Terazooming in on light (composite) axion like particles

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The Tera-Z phase of future $e^+e^-$ colliders, FCC-ee and CepC, is a goldmine for exploring $Z$ portal physics. We focus on axion-like particles (ALPs) that can be produced via $Z$ decays with a monochromatic photon. As a template model, we consider composite Higgs models with a light pseudo-scalar that couples through the Wess-Zumino-Witten term to the electroweak gauge bosons. For both photophilic and photophobic cases, we show that the Tera-Z can probe composite scales up to 100s of TeV, well beyond the capability of the LHC and current precision physics.
Our results also apply to generic ALPs and, in particular, severely constrain models that explain the muon $g-2$ anomaly.

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