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SEARCHES FOR EXOTIC DECAYS WITH NA62

The features of the NA62 experiment at the CERN SPS –high-intensity setup, trigger-system flexibility, high-frequency tracking of beam particles, redundant particle identification, and

ultra-high-efficiency photon vetoes –make NA62 particularly suitable to search for long-lived, weakly-coupled particles within Beyond the Standard Model (BSM) physics, using kaon and pion decays as well as operating the experiment in dump mode.

The NA62 sensitivity for searches of Dark Photons, Heavy Neutral Leptons and Axion-Like Particles are presented, together with prospects for future data taking at the NA62 experiment.

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