

## Dilepton results from HADES using Au+Au data at 1.23 AGeV

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The HADES experiment at GSI was designed to investigate the properties of hadrons inside dense nuclear matter. The latter is created in heavy-ion collisions at energies of 1-2 AGeV. HADES is currently the only running experiment that studies the region in the QCD phase diagram of very high net-baryon densities and low temperatures. Similar conditions are also present in one of the most fascinating objects of the universe: the neutron stars. Therefore, HADES has also the potential to improve our knowledge concerning the properties of such stars. The best probes that one can use to investigate a strongly interacting baryon-rich medium are the dileptons emerging from virtual photon decays. Since electromagnetic probes decouple from the dense interaction region once they are produced, their phase space distributions carry information about the temperature and structure of the dense QCD medium. In this talk we present preliminary dilepton results from the Au+Au data of HADES at 1.23 AGeV. A comparison with the dilepton mass distributions obtained from lighter collision systems will be provided. The analysis methods and future prospects will also be discussed.

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