



Radiation emission in the spacetime of a Bardeen black hole

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The scalar radiation emitted by a source in geodesic circular orbit around a regular Bardeen black hole is analyzed. We use the quantum field theory in a curved spacetime framework to obtain the emitted power of radiation by computing the one-particle-emission amplitude of scalar particles in the curved background. We compare our results to a similar setting in the spacetime of a Reissner-Nordström black hole.