## 28th Texas Symposium on Relativistic Astrophysics



Contribution ID: 204 Type: Talk

## Covariant Perturbations of the Scalar-Tensor Schwarzschild Black Hole

Saturday, 5 December 2015 16:55 (20 minutes)

In this talk I will review recent results regarding covariant, gauge-invariant perturbations to the scalar-tensor Schwarzschild black hole in the 1+1+2 formalism. I will discuss how we can introduce a set of master functions based on the Weyl tensor in order to cleanly decouple the evolution of tensor modes from the scalar modes. Relations to 2+2 and Newman-Penrose formalism will be briefly discussed.

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**Session Classification:** 02 - Exact solutions