Tests of the nature of black holes

Elisa Maggio, Daniel Mayerson, Aaron Zimmerman

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Discussion points

- Parametrizing individual or holistic model deviations?
- Pipelines?
- Merger phase deviations?
- Modeling/detecting chaos/resonance "glitches"?

Discussion points

- What are the loudest ECO signatures that we expect to detect with LISA?
- Which sources can provide the strongest signatures?
- Is ringdown spectroscopy possible with the LISA SNR? (nonlinearities, overtones, higher modes)
- Which numerical relativity waveform/analytical templates do we need to develop for ECOs?
- Which data analysis techniques do we need to develop to search for ECOs with LISA? (long and overlapping signals)