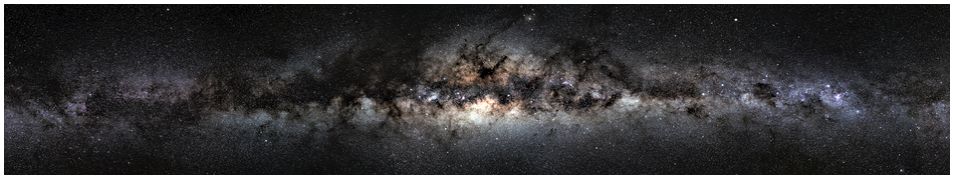

Contribution ID: **7** Type: **not specified**

New Techniques for Gravitational Wave Detection

Tuesday, December 7, 2021 10:10 AM (40 minutes)

I will discuss gaps in our coverage of the gravitational spectrum and possible new methods for filling them. Atom interferometry shows promise for detecting gravitational waves in the frequency range around a Hz, the "mid-band"between LIGO and LISA. Intermediate-scale atomic detectors are currently under construction. These would demonstrate the technology, paving the way for full-scale detectors in the mid-band. Recently it has been realized that there is unique science available only in the mid-band from observations of objects such as binary black holes or white dwarfs. Finally, I will also discuss the gap in the gravitational wave coverage from about 100 nHz to 0.1 mHz and new ideas for possible detection techniques in that band.

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Session Classification: Plenary