

## **Abstract**

The continuous background tremor of the earth in the mHz frequency band shows a number of narrow peaks extraneous to any Earth elastic eigenmode. The multiyear recordings of superconducting gravimeters sited in Antarctica, Australia, Canada and Italy have been analyzed through high resolution multitaper spectral methods. A set of coincident peaks is found for all stations which cannot be ascribed to any instrumental effect or terrestrial origin.

Such peaks appear to match in amplitude and frequency the expected earth response to the independently calculated gravitational wave monochromatic emission of binary systems, each one consisting of a compact object captured in close orbit by Sgr A\*. Cosmological abundance nominates as best candidate compact object main sequence stars with  $\sim 0.1$  solar mass.