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## Measuring supermassive black hole properties from binary inspirals in LISA

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The future spatial interferometer LISA will probably detect a few inspirals from binary black holes (BBH) located in the vicinity of a giant supermassive black hole (SMBH). The latter leaves its imprint on the waveform via several relativistic three-body effects. I will show that by including in the waveform Doppler terms up to quadratic order in the velocity of the center-of-mass of the BBH, one is able to accurately measure the mass of the SMBH. Our method provides for example a 30% determination of the SMBH mass if the BBH orbits it with a period of 100 years.

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