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## Using mHz gravitational waves to catch galactic center mergers of supermassive dark matter cores

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There is an open debate about whether some galactic centers (including Sgr A\*) could actually be supermassive dark matter cores made of fermions with masses in the range of 60-350 keV. We discuss the possibility of pinpointing mergers of such cores using mHz gravitational waves with the forthcoming space-based interferometers and assess the consequences of the possible outcomes from the physical and astrophysical viewpoint.

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