

## Echo-Sounding Axiverses

*Wednesday 9 July 2025 09:00 (30 minutes)*

The axiverse comes in different varieties ('axiverses') depending on their origin. Taking a closer look at the heterotic axiverse, we find the instanton-induced axion mass spectrum, as well as their matter sector couplings to be quite different from type IIB. We then look how leftover axiverse 'echoes' such as the presence of fuzzy DM, high-frequency GW production from axion inflation, or a dark radiation signal from axionic preheating, can be used toward 'sounding' out the type of axiverse.

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