



Contribution ID: 101

Type: **Poster**

Utilize EHT to search for axions.

Tuesday, 12 December 2023 17:17 (1 minute)

Axion will be produced massively around a spinning black hole through superradiance mechanism. Such axion cloud will rotate the polarization angle of passing photons, creating an oscillating polarization direction for photons from supermassive black hole. EHT has provided great resolution on image of M87* black hole. We will utilize the information EHT gathered to put a stringent constraint on axions by pixel analysis, which could be a brand new pipeline for many possible searched for new physics beyond SM.

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Session Classification: Accretion Processes