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Tokyo axion helioscope experiment and other axion experiments

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The axion is a hypothetical particle which was introduced to explain the magical CP conservation in QCD. The Tokyo axion helioscope aims to detect axions which can be produced in the sun if axions exist. It is equipped with a 2.3m-long 4T superconducting magnet to convert axions into photons, a gas container to hold dispersion-matching medium, a PIN-photodiode-array X-ray detector, and a telescope mount mechanism to track the sun. In the past measurements, axion mass up to 0.27eV have been scanned. Currently, we are in a new phase, where the mass region at around 1eV and higher is targetted.
In my talk, the latest result and the status of this experiment will be presented with the comparison with other solar axion searches including CAST. Some other axion search experiments will also be reviewed briefly.

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