

Flying MAV Navigates Without GPS (w/ Video)

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The MAV uses lasers and new algorithms to estimate its relative position, build a map, and locate a clear path. Image credit: MIT Robust Robotics Group.

(PhysOrg.com) -- During the last several years, researchers have been building micro air vehicles (MAVs) that can autonomously fly through different environments by relying on GPS for navigation. Recently, a team of researchers has designed an MAV that can navigate unknown environments without GPS, which could enable it to overcome several limitations of GPS-dependent vehicles.

The new MAV is being designed by the Robust Robotics Group at MIT's [Computer Science](#) and Artificial Intelligence Laboratory. Their work is motivated by the fact that, in some places, such as dense urban

environments or indoors, [GPS](#) is noisy and maps are unavailable, which can cause MAVs to get lost, fly into dangerous regions, or collide with obstacles. Providing MAVs with a tool other than GPS to navigate these environments could help the vehicles avoid these problems.

More information and videos: [MIT's Robust Robotics Group](#)

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