

## Physics Department Colloquium Series Dr.Barak Shoshany

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Friday January 24, 2025 12pm - 1pm, RFP 214/215

## Breaking the Speed of Light Barrier

It is well-known that according to Einstein's general theory of relativity, nothing can move faster than the speed of light. However, it turns out that this theory also has several "loopholes", which may - at least in theory - allow an object to get to its destination before any light beam gets there, while still being perfectly consistent with all known physics. In this lecture I will discuss my research into some of these loopholes, such as wormholes, warp drives, and hyperspace. I will also talk about potential consequences for space travel in the very far future, and the possibility that faster-than-light travel may lead to time travel.