

Tori, disks, and winds: the infrared emission in active galactic nuclei

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Dust accretion from the host galaxies onto supermassive black holes has been a cornerstone of AGN unification as it provides the angle dependent obscuration required to explain the various AGN types by a pure viewing angle effect. This accretion process happens on small spatial scales – indeed, too small for single infrared telescope to resolve it. Thanks to advancements in infrared interferometry, the last decade saw the dusty environment around an ever-growing number of AGN becoming directly accessible. Those spatially resolved observations shook up the idea of a “passive” torus causing the obscuration and led to a more dynamic picture of inflowing and outflowing dusty gas with significant dust processing occurring in the vicinity of the AGN. In this talk, I will present recent results from high angular resolution observations. Specific emphasis will be put on new constraints of the spatial distribution of the dust around the AGN and the dust composition, with an inferred predominance of large graphite grains. I will also show new results on the PAH emission within 100 pc of AGN and their usefulness (or lack thereof) as starformation tracers on these scales.