Nagisa Oi (JAXA/ISAS)

Correlation between SMBH and host galaxy

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SMBH and host galaxy properties @MIR using SPICA and TMT

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SPICA

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-	index	AGN100%	AGN50% (SB50%)	AGN0% (SB100%)
	[OIV]25.9μm/ [OIII]52μm	1.3	0.4	0.08
	PAH 11.2μm EW	0.1-0.2µm	0.5µm	0.8-1.0µm

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Measurement of SFR of nuclear-SB in dust torus with high spatial resolution with less contamination of host galaxy could help us to understand AGN (feedback) effects to host galaxies



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The edge of torus!?

If we resolve the torus, PAH EW transition along the radius tells the edge of the torus. Moreover, the ratio of PAH features (PAH7.7/11.2 or PAH11.0/11.2) can be the clue to know the ionization degree (with some assumptions).

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