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Title	A nearby galaxy perspective on dust evolution. Scaling relations and constraints on the dust build-up in galaxies with the DustPedia and DGS samples
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Several of the limitations of our study could be addressed by spatially resolving star forming regions. Performing a similar analysis on ≈ 100 pc scales within galaxies would allow us to access another important parameter: the density of the ISM. This quantity drives mantle growth and coagulation. Local variations of the dust-to-metal mass ratio are good indications of grain growth and can help us break the degeneracy with SNII destruction (Sect. 5.2.2). In addition, spatial resolution would be a way to address the origin of the trend of q_{AF} with metallicity (Sect. 4.2), as well as resolving ETGs to quantify the grain sputtering timescale (Sect. 4.1.2). Numerous spatially resolved dust studies have already been published (e.g., Galliano et al. 2011; Mattsson & Andersen 2012; Draine & Hensley 2013; Hunt et al. 2015; Roman-Duval et al. 2017; Aniano et al. 2020). We are currently preparing several papers of a resolved subsample, with the same consistent approach as employed in the present manuscript (Roychowdhury et al., in prep.). The main observational challenge in order to address these degeneracies is however to obtain spatial resolution in ELMGs, at far-IR wavelengths. The data are currently very limited, because the sensitivity of *Herschel* was not high enough. SPICA (van der Tak et al. 2018) was the only observatory on the horizon to have the sensitivity to produce resolved far-IR maps of ELMGs. Its sudden cancellation by ESA might leave the important open questions raised in this paper unanswered for several decades.

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