A radio view of dust-obscured star formation

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Propositions accompanying the thesis

A radio view of dust-obscured star formation

1. Deep 3 GHz COSMOS-XS source counts show a slight downturn below 10 uJy flux densities, confirming indications from indirect observations (*Chapter 2*).

2. Star formation rate density estimates based on ultraviolet luminosity functions underestimate the star formation rate density significantly at high redshift, even if they are corrected for dust obscuration (*Chapter 3*).

3. 'Optically dark' sources play a non-negligible role at high redshift and contribute significantly to the star formation rate density (*Chapter 4 & 5*).

4. ALMA spectral scan observations are a good tool to obtain spectroscopic redshifts for 'optically dark' galaxies with photometric redshifts (*Chapter 5*).

5. Pushing the flux density limits of surveys using deep radio observations is rewarded with the opportunity to study an unexplored part of parameter space.

6. Although it sounds simple, counting radio sources is harder than you think.

7. Reproduction of existing work is a crucial part of research.

8. Multifrequency observations are necessary to understand the properties of radio sources.

9. Interacting with a cat promotes mental well-being and reduces stress during a PhD.

10. As humanity is making the earth inhabitable in an appallingly short time span, we need a coordinated response to the climate crisis.

Dieuwertje van der Vlugt
Leiden, December 6, 2023