Profiling filaments: dust emission, extinction, and scattering

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We compare different observational methods (submm dust emission, NIR extinction, NIR scattering) and simulations

1. Compare profiles: **NIR extinction** vs. **submm dust emission** (*Herschel*) observations
2. Use **scattered NIR surface brightness** to derive the column density map at the scale of a complete filament
3. Observational biases of filament profiles derived from submm dust emission maps using **MHD simulations** and RT
4. Statistical analysis of the filaments observed in the ***Herschel*** programme **Galactic Cold Cores**, showing a range of different environments