Multi- and hyper-spectral data fusion for JWST

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Abstract:
The ideal instrument an astrophysicist dreams of combines both high spatial and spectral resolutions on a broad wavelength range. However, we usually have access to one and not the other due to technological constraints. Integral Field Spectrographs, such as MUSE at the VLT, provide hyper-spectral data which combined with HST multi-band images can produce both high spatial and spectral resolutions thanks to data fusion methods. I will present ongoing developments on such data fusion algorithms aiming to combine JWST NIRCam and NIRSpec data in order to provide a datacube of high resolution both in spatial and spectral dimensions.