



Zooming into a PDR. a) Multi-wavelength view of a Galaxy (M81): UV tracing massive stars (blue), optical light tracing H ii regions (green), and PAH emission tracing PDRs (red). b) Sketch of a typical massive star-forming region (at a distance of 2 kpc). c) Zoom in on one of the numerous PDRs, showing the complex transition from the molecular cloud to the PDR dissociation front, the ionization front and the gas flow into the ionized region. Inserted is the ALMA molecular gas data of the Orion Bar, at a resolution of 1'' (dashed lines; Goicoechea et al. 2016). The inset shows a model of the structure of the PDR. The scale length for FUV photon penetration corresponds to a few arcsec. The beam sizes of ISO-SWS, Spitzer-IRS and JWST-MIRI are indicated. JWST will resolve the 4 key regions.