## X-Ray Dominated Chemistry in Hydrogen-rich Atmospheres

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The photochemistry of simple molecules embedded in an intense XUV irradiation, in a dust-free gas of solar composition, has been investigated. The propagation of high energy radiation through model atmospheres is studied for a large range of incident photon energies, and X/UV photon fluxes ratios. We also discuss possible observables in the context of transiting exoplanets.