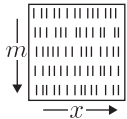
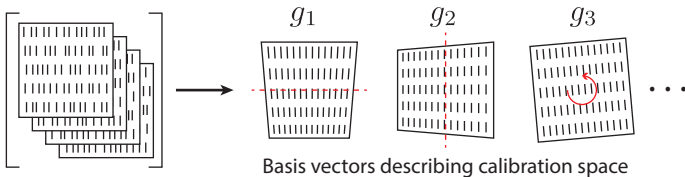


Input

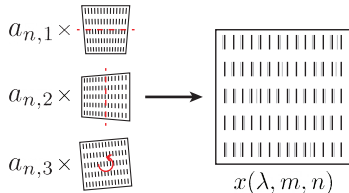
For each exposure, n , a list of calibration line positions, x , with known wavelengths, λ , and echelle orders, m .



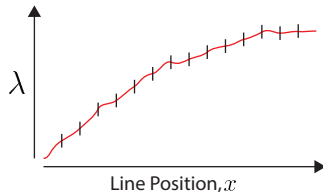
1. Dimensionality Reduction and Denoising



2. Find Calibration State for n



3. Interpolate



Output

Full de-noised wavelength model

$$x(\lambda, m, n) = g_0(\lambda, m) + \sum_{k=1}^K a_{nk} g_k(\lambda, m)$$

invert to $\lambda(x, m, n)$