Abstract: I will explain a symplectic analogue of the spectral curve construction in the moduli of Higgs bundles. More specifically, exact Lagrangian surfaces filling Legendrian knots which encode Stokes braiding at a singularity provide an abelian chart for the (non-abelian) wild character variety associated to the singularity. I will demonstrate this in several simple examples and then (time-premitting) describe the very different behavior one finds for Lagrangian threefolds filling Legendrian surfaces. This talk is based on joint works with Linhui Shen, Vivek Shende, David Treumann and Harold Williams.

The talk is part of the 2-day meeting <a href="http://schapos.people.uic.edu/SpectralhiggsIII.html"">"Current trends on spectral data for Higgs bundles III"</a>