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>*