Abstract: The non-abelian Hodge theory gives a correspondence between the moduli space of representations of the fundamental group of a surface into a Lie group $G$ with the moduli space of $G$-Higgs bundles over the Riemann surface. The correspondence is through looking for an equivariant harmonic map to the symmetric space associated to $G$, to a given representation or a given Higgs bundle. We discover some geometric properties of such harmonic maps associated to cyclic Higgs bundles.

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>