A new spin for Hurwitz numbers and Chiodo classeusual Hurwitz theory provides a large class of examples for topological recursion and generally obeys 2D Toda integrability. The Gromov-Witten / Hurwitz correspondence links it to the target P^1, and its corresponding cohomology representation on the moduli spaces of curves recovers classes studied independently.The ‘spin' counterpart of the story recently received some attention, especially from the integrability side where it is linked to the BKP hierarchy, and from the Gromov-Witten-Witten side where it is connected to Kähler surface targets. We investigate how topological recursion behaves for this problem, encountering quotients of equivariant spectral curves. Moreover, we apply Givental formalism to compute the corresponding cohomology class, where Witten’s CohFT makes its appearance. Based on a recent work with A.Giacchetto and R. Kramer.