The Chmutov-Duzhin formulas for the \$J^\pm\$ invariants

January-19-14 7:45 PM

[CD]:
$$J^+ - J^- = n = \#$$
double points, and $J^-(\Gamma) = 1 - \sum_{\tilde{C}} \operatorname{ind}_{\tilde{\Gamma}}^2(\tilde{C}) \chi(\tilde{C}),$

where \tilde{C} runs over regions in the oriented smoothing $\tilde{\Gamma}$ of Γ and χ denotes Euler characteristic.



Why does it have the right jumps? Why is it a.F.T?

