

I will introduce what Instanton-dyons are, why they are interesting and why they are needed. I will show how both dyons and the zero modes of the dyons depend on the Polyakov loop and therefore also on temperature. We will compare the behavior of the dyon's zero-modes to the behavior of zero-modes on lattice configurations near the critical temperature using the overlap operator, which gives exact zero-modes. Comparison between lattice results and dyon zero-mode behavior allows us to extract the Polyakov loop expectation value, without calculating the Polyakov loop directly. This shows remarkable agreement.