On the Turaev genus

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Abstract. This is a joint work with K. Kishimoto. In 2006, Dasbach et.al. introduced the Turaev genus of a link, which measures how far it is from alternating links. In this talk, we show the Turaev genus is bounded above by the dealternating number. As an application, we show non-alternating knots of eleven or fewer crossings except two knots have Turaev genus one.