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Non-rectangular constrained Willmore minimizers.

We will discuss the conformally constrained Willmore problem for tori of non-rectangular conformal class. By estimates of Li-Yau and Montiel-Ros, it is known that the Clifford torus minimizes the Willmore energy in its conformal class. Moreover, from a previous work with R. M. Schaetzle, it is known that the homogeneous tori are solutions of the conformally constrained Willmore problem for conformal classes close to the square one. In this talk, we will explain how the $(1, 2)$ -equivariant tori with intrinsic period 1 are solutions of the conformal Willmore problem for non-rectangular conformal classes close to the square one discussing a joint work with L. Heller. (Received August 14, 2020)