Delaunay tori with prescribed mean curvature

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Abstract. Delaunay surfaces are surfaces of revolution in the Euclidean 3-space, with constant mean curvature (CMC) and constitute the building blocks in the construction of a plethora of compact and noncompact CMC surfaces with given topological or geometrical properties. In my talk, I will show that Delaunay cylinders can be also bent to construct closed surfaces topologically equivalent to tori, with prescribed mean curvature H, when H converges to a constant at infinity in a suitable way. This is a joint work with Alessandro Iacopetti (University of Roma Sapienza) and Monica Musso (University of Bath).