

On the area of Lawson minimal surfaces in the 3-sphere

Martin Traizet¹, Lynn Heller², Sebastian Heller³

¹ University of Tours, France

² University of Hannover, Germany

³ University of Hamburg, Germany

Lawson has constructed minimal surfaces in the 3-sphere which have genus k and area less than 8π . They are conjectured to minimize the Willmore energy amongst compact surfaces of genus k . We construct Lawson surfaces by integrable system (DPW) methods and obtain a precise estimate of their area as k goes to infinity.