

Area Estimates for High genus Lawson surfaces via DPW

Lynn Heller^{1,*}, Sebastian Heller², Martin Traizet³

¹*Leibniz University Hannover, Germany*

²*University of Hamburg, Germany*

³*Universit'e de Tours, France*

*Email: `lynn.heller@math.uni-hannover.de`

Starting at a saddle tower surface, we give a new existence proof of the Lawson surfaces $\xi_{m,k}$ of high genus by deforming the corresponding DPW potential. As a byproduct, we obtain for fixed m estimates on the area of $\xi_{m,k}$ in terms of their genus $g = mk \gg 1$.

References

- [1] L. Heller, S. Heller, and Ch. B. Ndiaye, Area Estimates for High genus Lawson surfaces via DPW, preprint: arXiv:1907.07139.