

# Extremal Sasaki twins on the total space of $S^3$ -bundles over compact Riemann surfaces

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In recent work with C. P. Boyer, H. Huang, and E. Legendre we introduced the notions of weighted extremal Kähler twins together with the related notion of extremal Sasaki twins. In this presentation I will discuss these definitions and then focus on the following special existence result which is also a result of joint work with C. P. Boyer, H. Huang, and E. Legendre. For any compact Riemann surface of any genus there exist a pair of extremal Sasaki twins on the total space of the trivial as well as the non-trivial  $S^3$ -bundle over the Riemann Surface. In both cases, the CR-structure arises from a smooth join as defined by C.P. Boyer, K. Galicki, and L. Ornea.

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