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*Quasi-monopoles*

(w. R. Bielawski and S. Cherkis)

It has been understood for a while that the end of the moduli space of charge  $k$   $SU(2)$  monopoles in  $R^3$  decomposes into regions where one has a glueing of monopoles of charges  $k_1, \dots, k_s$ ; i.e a picture of well separated particles. This approximation is rather rough, in that comparing the metrics only gives an approximation to order  $1/R$ , where  $R$  is the separation parameter. Any further improvement requires some form of interaction between the particles. We define spaces of quasi-monopoles, with a separate spectral curve for each charge, and an interaction through their intersection divisors. The spaces of these quasi-monopoles are hyperkahler, and approximates the monopole metric to order  $e^{-cR}$ . They also have torus actions, which allow a way of finalising Segal-Selby's proof of the Sen conjecture in the coprime case.