1052-20-76 **Gareth A. Jones*** (`G.A.Jones@maths.soton.ac.uk`), School of Mathematics, University of Southampton, Highfield, Southampton, Hampshire SO17 1BJ, England. *Beauville surfaces and finite groups.*

Beauville surfaces are 2-dimensional complex algebraic varieties which are rigid in the sense of having no deformations. They can be constructed as quotients $(C_1 \times C_2)/G$ where C_1 and C_2 are compact Riemann surfaces of genus at least 2, with a group G acting as automorphisms of each so that it acts freely on $C_1 \times C_2$, and so that $C_i \to C_i/G$ is a covering of the Riemann sphere branched over three points (i.e. each C_i admits a regular dessin with automorphism group G). Bauer, Catanese and Grunewald have conjectured that every non-abelian finite simple group G, except A_5, acts in such a way. Extending their results and those of Fuertes and González-Diez, I shall verify this for the simple groups $L_2(q)$, the Suzuki groups $Sz(2^e)$, the Ree groups $R(3^e)$, and the quasi-simple groups $SL_2(q)$, $q > 5$. (Received August 20, 2009)