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**Laura Ciobanu**, Department of Mathematics, Herriott-Watt University, Edinburgh, EH14AS, United Kingdom, **Benjamin Fine\*** ([fine@fairfield.edu](mailto:fine@fairfield.edu)), Department of Mathematics, Fairfield University, Fairfield, CT 06824, and **Gerhard Rosenberger**. *The Surface Group Conjecture : Cyclically Pinched and Conjugacy Pinched One-Relator Groups.*

The general **surface group conjecture** asks whether a one-relator group where every subgroup of finite index is again a one-relator group and every noncyclic subgroup of infinite index is a free group (Property IF). We resolve several related conjectures given in by Fine, Kharlampovich, Myasnikov, Remeslennikov and Rosenberger [FKMRR]. First we obtain the Surface Group Conjecture B for cyclically pinched and conjugacy pinched one-relator groups. That is: if  $G$  is a cyclically pinched one-relator group or conjugacy pinched one-relator group satisfying property IF then  $G$  is free, a surface group or a solvable Baumslag-Solitar Group. Further combining results in [FKMRR] on Property IF with a theorem of H. Wilton [W] and results of Stallings, and Gildenhuys, Kharlampovich and Myasnikov we show that Surface Group Conjecture C proposed in [FKMRR] is true, namely: If  $G$  is a finitely generated nonfree freely indecomposable fully residually free group with property IF, then  $G$  is a surface group.

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