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**Mohamed Ait Nouh\*** (manouh@utep.edu), 500 University Avenue, El Paso, TX 79968. *THE MINIMAL GENUS PROBLEM IN  $\mathbb{C}\mathbb{P}^2 \# \mathbb{C}\mathbb{P}^2$ .*

T. Lawson conjectured that the minimal genus of  $(m, n) \in H_2(\mathbb{C}\mathbb{P}^2 \# \mathbb{C}\mathbb{P}^2)$  is given by  $\binom{|m|-1}{2} + \binom{|n|-1}{2}$  -this is the genus realized by the connected sum of algebraic curves in each factor. In this talk, we give two infinite families of counterexamples and finite positive examples to this conjecture. (Received September 11, 2014)