

A Bernstein-type result for the minimal surface equation

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Abstract. We prove the following Bernstein-type theorem: if u is an entire solution to the minimal surface equation, such that $N - 1$ partial derivatives $\frac{\partial u}{\partial x_j}$ are bounded on one side (not necessarily the same), then u is an affine function. Its proof relies *only* on the Harnack inequality on minimal surfaces proved in [4] thus, besides its novelty, our theorem also provides a new and self-contained proof of celebrated results of Moser and of Bombieri and Giusti.

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