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A Bernstein-Type Result for the Minimal Surface Equation

We prove the following Bernstein-type theorem: if u is a solution to the minimal surface equation over \mathbb{R}^N , 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. Besides its novelty, our theorem also provides a new, simple and self-contained proof of celebrated results of Moser and of Bombieri & Giusti.