

A two-valued Bernstein theorem in dimension four

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The Bernstein theorem is a classical result in geometric analysis, which states that entire minimal graphs are linear in all dimensions up to eight. Here we present a generalisation to so-called two-valued minimal graphs. These are graphs of two-valued functions, which are singular geometric objects that model the behaviour of minimal hypersurfaces near branch points. The two-valued Bernstein theorem we present proves that entire two-valued minimal graphs are linear in dimension four.