

A proof of the Morse-Bott lemma

by

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Abstract: It is often said that the Morse-Bott Lemma can be viewed as a “parameterized” Morse Lemma, and its proof should follow from the differentiability of the methods used to prove the Morse Lemma. The goal of this expository paper is to fill in the details. We present Palais’ proof of the Morse Lemma using Moser’s path method, which yields the necessary differentiability.