1146-35-148    **Peter William Bates** and **Jiayin Jin\*** (`jin@math.gatech.edu`), School of Mathematics, Georgia Institute of Technology, Atlanta, GA 30332, and **Kening Lu** and **Chongchun Zeng**. *Center manifolds of approximately invariant manifolds for maps with applications.*

We extend the results in [Bates, Lu and Zeng, Approximately Invariant Manifolds and Global Dynamics of Spike States, Inventiones Mathematicae, 174 (2008), 355-433] to case without normal hyperbolicity. We then show several applications of our abstract results to dispersive Hamiltonian PDEs. (Received January 17, 2019)