1147-37-232 **Christian Wolf***, 160 Convent Ave, New York, NY 10031. *Pressure and dimension: From polynomials to hyperbolic and parabolic Hénon maps.* Preliminary report.

We consider the topological pressure and dimension theory of complex Hénon maps which are small perturbations of one-dimensional polynomials. In particular, we derive regularity results for the generalized pressure function in a neighborhood of the degenerate map (i.e., the polynomial). This unifies results concerning the regularity of the pressure function for polynomials by Ruelle and for complex Hénon maps by Verjovsky and Wu. As a consequence we obtain that in the hyperbolic case the Hausdorff dimension of the Julia set is a continuous non-differentiable function in a neighborhood of the polynomial. We also discuss possible extensions to parabolic Hénon maps. (Received January 12, 2019)