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John M Neuberger* (John.Neuberger@Nau.Edu), Department of Mathematics and Statistics, Box 5717, Flagstaff, AZ 86011, and **James W Swift** and **Nandor Sieben**. *Newton's Method and Partial Differential and difference Equations.*

We will discuss the application of the Gradient-Newton-Galerkin-Algorithm (GNGA) of Neuberger and Swift to various Partial Differential Equations (PDE) and Partial difference Equations (PdE). In particular, we are interested in automating the following of bifurcation diagram branches using knowledge of the symmetry of the region or graph. Specific results will be presented where the region is the so-called Koch snowflake region or the graph is a simple graph. (Received September 19, 2005)