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Christine Berkesch Zamaere* (cberkesc@math.umn.edu), Minneapolis, MN, and **Jens Forsgard** and **Laura Felicia Matusevich**. *A-hypergeometric solution sheaves*.

A-hypergeometric systems are the D-module counterparts of toric ideals, and their behavior is linked closely to the combinatorics of toric varieties. I will discuss recent work that aims to explain the behavior of the solutions of these systems as their parameters vary. Our goal, which can be achieved in special cases, is to stratify the parameter space so that solutions are locally analytic within each (connected component of a) stratum. In cases with nice combinatorics, we show that the solutions are closely related to certain local cohomology modules. (Received August 07, 2015)