Alexei S Kolesnikov* (akolesnikov@towson.edu), Department of Mathematics, Towson University, 8000 York Rd., Towson, MD 21252, and Christopher Lambie-Hanson. The Hanf number for amalgamation property.

We address the problem of computing the Hanf number for the amalgamation property of abstract elementary classes. We define a family of AECs that we call coloring classes. For this family, we show that the Hanf number for the disjoint amalgamation property and the amalgamation property is $\beth_{|L|^+}$, where $|L|$ is the size of the language. The results improve those obtained earlier by Baldwin, Kolesnikov, and Shelah. (Received September 13, 2014)