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Nadya Askaripour* (nadya.askaripour@gmail.com) and **A. Boivin**. *On closed sets of approximation on non-compact Riemann surfaces.*

Let R be a non-compact Riemann surface. A closed subset E of R is called a set of holomorphic (resp. meromorphic) approximation if every function holomorphic on E can be approximated uniformly on E by functions holomorphic (resp. meromorphic) on R . The characterization of the sets of approximation (either holomorphic or meromorphic) is still open in general, though it is known in some cases e.g. when E is compact and R arbitrary, or when R is the complex plane, then it is known by N. U. Arakelyan.

Non-compact Riemann surfaces are interesting since they might be of infinite genus and they might have complicated boundary. I will discuss an extension theorem for Riemann surfaces, which is used to improve the characterization of the closed sets of approximation, and recent results in this direction obtained with A. Boivin. (Received February 08, 2014)