1017-14-4   **Florian Pop*** (`pop@math.upenn.edu`), Department of Mathematics, University of Pennsylvania, DRL, 209S 33rd Street, Philadelphia, PA 19104. *From topological covers to algebraic numbers.* Preliminary report.

It is an idea originating in the so called "Grothendieck's Program" that one should try to use the interplay between Topology and Arithmetic via the arithmetical fundamental group in order to do both: First, describe/study the Galois structure of fields and varieties by topological/combinatorial methods. Second, understand/study aspects of Arithmetic and Geometry which are encoded in Galois theory. This is the so called Anabelian Geometry. In my talk I will discuss some aspects of this point of view and present old and new results in anabelian geometry. (Received February 19, 2006)