1078-11-271 **Hafedh Herichi***, Mathematics department, University of California, Riverside, Riverside, CA 92521. On the Apollonian integral packing and self-similar tilings.

On this expository talk, we discuss some of the geometric and analytic fundamental properties of the Apollonian integral packing (AIP). We also introduce the class of self-similar tilings as studied in the work of M. L. Lapidus, E. J. Pearse and S. Winter. We end up the talk presenting an open problem, related to AIP, within the spirit of the theory of complex dimensions in fractal geometry which was developed by M. L. Lapidus and M. v. Frankenhuijsen. (Received December 12, 2011)