

1167-11-221 **Michel L. Lapidus*** (lapidus@math.ucr.edu), Department of Mathematics, Riverside, CA
92521-0135. *Open Problems and Conjectures in Number Theory and Arithmetic
Geometry*. Preliminary report.

We will discuss several difficult open problems and conjectures in number theory and arithmetic geometry, often motivated by mathematical or theoretical physics, dynamical systems and fractal geometry (in particular, the author and his collaborators' theory of complex fractal dimensions). (Received March 08, 2021)