Bernhard REINKE : *The Weierstrass root-finder is not generally convergent*

We will give an overview of root-finding methods and their interpretation as complex dynamical systems. The main focus will be the Weierstrass/Durand-Kerner method and its similarities and differences to the Newton and the Ehrlich-Aberth methods.

In particular, we will show how to use methods from computer algebra to investigate (and/or establish) the existence of attracting periodic cycles, as well as diverging orbits, and present explicit examples of both phenomena for the Weierstrass method.

Vendredi 25 novembre, 14h-15h, salle 0A1.