Title: **Functional equations**

Abstract: A functional equation is an equation where the unknown, instead of being some kind of variable, is a whole function, and the problem of solving a functional equation means finding a function that satisfies it. We will show, by walking some historical footsteps of mathematical greats, why this is an interesting kind of question to ask, and in the process play with some surprisingly deep and maybe counterintuitive analysis.

The talk is aimed at a very general audience, accessible to anyone with a notion of what continuity means.