## **Reflections on integrability.**

We will discuss recent developments and open problems in the algebraic theory of universal reflection equations and its application to quantum integrable systems with boundary conditions, which is one of its main motivations. The main class of examples is described by quantum symmetric pairs of affine type (a quantum affine algebra together with a so-called quantized fixed-point subalgebra). They provide a limitless supply of trigonometric K-matrices.

**Orateur:** VLAAR, Bart