

Reloids

Reloids are a trivial generalization of uniform spaces.

Roughly speaking, a reloid is a filter on a Cartesian product of two sets.

To be precise, I define a reloid as a triple $f = (A; B; F)$ where A and B are sets and F is a filter on $A \times B$.

Note that reloids are also a generalization of binary relations.

The reverse reloid f^{-1} is defined as follows:

$$f^{-1} = (A; B; F)^{-1} = (B; A; F^{-1}).$$

I will also denote $\text{GR}(A; B; F) = F$.