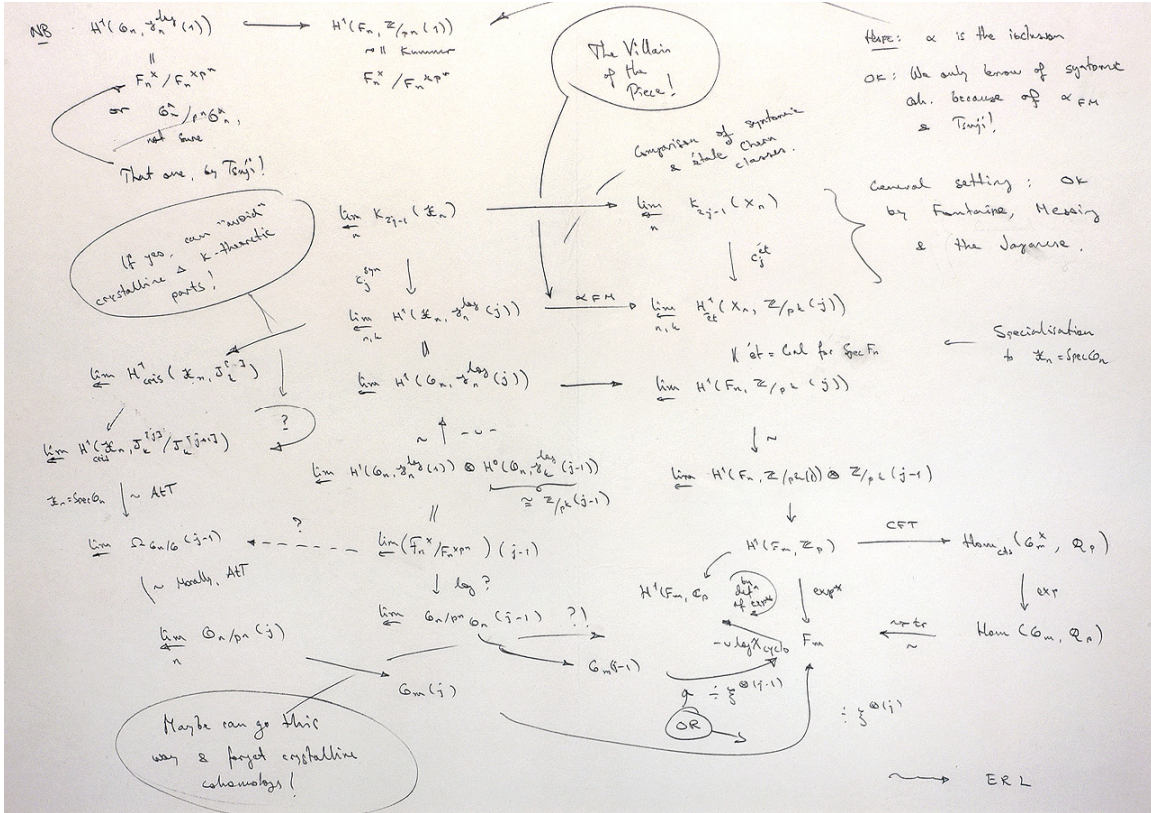


# Artwork 13 - Generalised Explicit Reciprocity Law

Artworks at Science Learning Centre London

Hannu Harkonen



Drawing 29 cm x 41 cm  
 Note: All artworks are copyrighted

This diagram was one of my first attempts to understand the Explicit Reciprocity Law that plays a mysterious role in Number Theory. The problem is to get from the "K-group" at the top-left corner of the diagram to the bottom-right corner in a tractable way. This can be achieved using the "crystalline" objects at the left-hand side of the diagram, and the miracle is that the resulting formula produces values of arithmetically interesting functions, such as the Riemann zeta function.

The drawing was exhibited at the 2004 Royal Academy of Arts summer exhibition.