Meta–Groups, Meta–Bicrossed–Products, and the Alexander Polynomial, 1

Abstract. A straightforward proposal for a group-theoretic invariant of knots fails if one really means groups, but works once generalized to meta–groups (to be defined). We will construct one complicated but elementary meta–group as a meta–bicrossed–product (to be defined), and explain how the resulting invariant is a not–yet–understood generalization of the Alexander polynomial, while at the same time being a specialization of a somewhat–understood “universal finite type invariant of w–knots” and of an elusive “universal finite type invariant of v–knots”.

Define meta–graph

Example

Bicrossed products

meta Bicrossed prod
<table>
<thead>
<tr>
<th>$\beta(H,T)$</th>
<th>What is it good for</th>
</tr>
</thead>
</table>

![Program & replies.](image)

Who is it coming from.