

## MATCHED PAIRS AND YETTER–DRINFELD BRACES

*Joint work with A. Sciandra*

On a group  $G$ , the following data are equivalent: (1) a braiding, (2) a matched pair of actions, (3) a bijective 1-cocycle, (4) a skew brace structure. This is already well known.

For a Hopf algebra  $H$ , an analogous picture has been reconstructed. The role of skew braces is played by *Yetter–Drinfeld braces*. We describe this correspondence in details.

Yetter–Drinfeld braces provide a framework to interpret Majid’s transmutation. We show that every coquasitriangular Hopf algebra gives rise to a Yetter–Drinfeld brace, and we present some concrete examples arising in this way.