1011-46-345   **Maria Grazia Viola*** (`viola@mast.queensu.ca`), Department of Mathematics, Queen's University, Kingston, ON K7L 3N6, Canada, and **Kenneth Dykema**. *Non-outer conjugate actions on a free product factor.*

In the '70s A. Connes gave a complete classification of automorphisms on the hyperfinite II_1 factor up to outer conjugacy. He showed that two automorphisms are outer conjugate iff they have the same outer period and obstruction to lifting. A very different situation appears in the case of free product factors (in particular free group factors). We show the existence of two actions on a free product factor, which have the same outer period and obstruction to lifting, but are not outer conjugate. (Received August 30, 2005)