1054-46-76

Ionut Chifan* (`ionut.chifan@vanderbilt.edu`), 1326 Stevenson Center, Nashville, TN 37240,
and **Adrian Ioana** (`adiioana@math.ucla.edu`), Los Angeles, CA 90095. *On relative property (T)
and Haagerup's property.*

For a given countable group Γ we consider the following three properties:

1. Γ has an infinite subgroup with relative property (T).

2. The group von Neumann algebra $L(\Gamma)$ has a diffuse von Neumann subalgebra with relative property (T).

3. Γ does not have Haagerup's property.

It is clear that $(1)\Rightarrow(2)\Rightarrow(3)$. We prove that both of the converses are false. This is joint work with Adrian Ioana. (Received September 04, 2009)