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**Markus Schmidmeier** and **Helene R. Tyler\*** ([helene.tyler@manhattan.edu](mailto:helene.tyler@manhattan.edu)), Department of Mathematics and Computer Scienc, Manhattan College, Riverdale, NY 10471. *Gabriel-Roiter families occurring in tubes.*

The Gabriel-Roiter measure was first introduced by Roiter in his 1968 proof of the first Brauer-Thrall conjecture. For a finite length module, the pair consisting of the GR-measure and the GR-comeasure defines the position of the module in the rhombic picture, as defined by Ringel. It turns out that modules in the same vicinity display similar behaviour with respect to Auslander-Reiten translation. In particular, the set of modules, which is given by intersecting a ray with a coray in a stable tube in the Auslander-Reiten quiver, corresponds to a limit point in the rhombic picture. We show that in the special case of quivers of type  $\widetilde{\mathbb{A}}_n$  with suitable orientation, the system of limit points in the rhombic picture provides a tiling of the corresponding tube. (Received August 03, 2010)