962-16-1321 **Philipp S Rothmaler*** (prothmaler@wesleyan.edu), Philipp Rothmaler, Dept. of Math., Wesleyan University, Middletown, CT 06459-0128. *When flat covers of pure-injective modules are pure-injective.*

The concept of pure-injective envelope plays a crucial role in the model theory of modules. A reason is that every module has such an envelope and that they share the same first-order theory. Dual to this concept is that of flat cover. The recent positive solution of Enochs' problem if every module has a flat cover raises the question of how similar a module is to its flat cover. We consider one instance of this question—the one from the title. Namely, we show that flat covers of pure-injective modules are pure-injective iff pure-injective envelopes of flat modules are flat (iff all flat cotorsion modules are pure-injective) and prove that the class of rings over which this is true for, say, all left modules properly contains the class of all right coherent rings. (Received October 03, 2000)