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Peter Mayr* (peter.mayr@jku.at), Altenberger Straße 69, 4040 Linz, Austria, and **Nik Ruskuc**. *Finiteness properties of direct products*. Preliminary report.

It is well known that the direct product of two groups is finitely generated if and only if both factors are finitely generated. A corresponding result holds for lattices. We show that these facts are not particular for groups or lattices but special instances of results on Mal'cev algebras, idempotent algebras, respectively.

More generally we consider for which algebras and for which finiteness conditions P (finite presentability, residual finiteness, ...) the following statement is true: $A \times B$ has P iff A and B has P . This is joint work with Nik Ruskuc (University of St Andrews). (Received August 13, 2013)