1041-52-281   **Károly Bezdek** and **Balázs Csikós*** (`csikos@cs.elte.hu`), Inst. of Mathematics, Eötvös University, Pázmány Péter stny. 1/C., Budapest, H-1117, Hungary, and **Rolf Schneider**.
Maximizing the volume of spherically convex bodies of given inradius.

We consider the problem of finding spherically convex bodies having maximal volume among spherically convex bodies of a given inradius. One approach to this problem leads to the question of finding simplices of critical volume among spherical simplices circumscribed about a given spherical ball. Another approach is to study the dual problem. By duality, the original problem can be rephrased as a sharpening of a theorem of Linhart. (Received August 12, 2008)