THE FIELDS INSTITUTE

ABSTRACTS 1.2

FOR RESEARCH IN MATHEMATICAL SCIENCES

MIRJANA VUKOVIC University of Sarajevo, Bosnia and Herzegovina

Generalities about graded structures

It is well-known that the classical graded structures are objects of a cathegory that is not closed with respect to the direct product of the homogeneous parts of the factos In our common paper M. Krasner and myself succeeded to construct the structures (groups, rings, modules), called paragraded, that generalize corresponding structures in general, and such that in each of this three cases its category would be closed in respect to the direct sum and the direct product in which the homogeneous part would be the direct product of the homogeneous parts of factors. This work is at the same time a generalization of classical graduation, as defined by Bourbaki, as well as an extension of the work done by M. Krasner (see 2.). I shall talk about some new result.