

THE OBSERVATIONAL STEPWISE REFINEMENT PROCESS

A. MADEIRA AND M. MARTINS

The *algebraic stepwise refinement* is a useful process to build implementations that consists in refining, in an admissible way, step-by-step a given specification, by introducing new requirements (implementation decisions) in order to obtain a precise description of an algebra, i. e., the desired implementation. A refinement is a step of this process; that is, a procedure to obtain a more concrete specification from a more abstract one. We present some considerations on the generalization of this process that allows that the signatures may differ during the process (via signature morphisms). We also discuss the notion of refinement in the context of the observational paradigm.

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DEPARTMENT OF MATHEMATICS, UNIVERSITY OF AVEIRO