ENRICHED LOCALLY GENERATED CATEGORIES

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We introduce the notion of M-locally generated category for a factorization system (E,M) and study its properties. We offer a Gabriel-Ulmer duality for these categories, introducing the notion of nest. We develop this theory also from an enriched point of view. We apply this technology to Banach spaces showing that it is equivalent to the category of models of the nest of finite-dimensional Banach spaces. This is a report on joint work with Jiří Rosický.