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Lubin-Tate formal groups and module structure over Hopf orders

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Abstract. Over the last years Hopf orders have played an important role in the study of integral module structures arising in arithmetic geometry in various situations. We axiomatize these situations and discuss the properties of the (integral) Hopf algebra structures which are of interest in this general setting. In particular, we emphasize the role of resolvents for explicit computations. As an illustration we apply our results to determine the Hopf module structure of the ring of integers in relative Lubin-Tate extensions.

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