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Mehrdad Kalantar*, University of Houston, Houston, TX 77204, and **Pawel Kasprzak, Adam Skalski** and **Piotr Soltan**. *Open quantum subgroups of locally compact quantum groups, and induced representation.*

We introduce the notion of an open quantum subgroup of a locally compact quantum group and give several equivalent characterizations in terms of group-like projections, inclusions of quantum group C^* -algebras and properties of respective quantum homogenous spaces (joint work with Pawel Kasprzak and Adam Skalski). We then show the process of inducing unitary representations from open quantum subgroups of locally compact quantum groups, as defined by Kustermans, and as as defined by Vaes are both equivalent to the classical construction of Rieffel for inducing representations from C^* -subalgebras (joint work with Pawel Kasprzak, Adam Skalski and Piotr Soltan). (Received September 17, 2016)