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Irreducible completely pointed modules over quantum groups of type A.

We give a classification of all irreducible $U_q(\mathfrak{sl}_n)$ -modules which are completely pointed (meaning that all weight spaces are one-dimensional) over a characteristic zero field in which q is not a root of unity. This generalizes the classification result of Benkart, Britten and Lemire in the non quantum case. Different techniques are necessary in the quantum case. We also show that any infinite-dimensional irreducible completely pointed $U_q(\mathfrak{sl}_n)$ -module can be obtained from some irreducible completely pointed module over the quantized Weyl algebra A_n^q . (Received July 29, 2014)