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**Mariana Pereira\*** ([mpereira@math.tamu.edu](mailto:mpereira@math.tamu.edu)), Department of Mathematics, Mailstop 3368, Texas A&M University, College Station, TX 77843-3368. *Simple modules for restricted two-parameter quantum groups*. Preliminary report.

In 2003, David Radford introduced a new method to construct simple modules for the Drinfel'd double of certain finite-dimensional graded Hopf algebras. For a Hopf algebra  $H$ , he established a correspondence between isomorphism classes of simple modules for the Drinfel'd double  $D(H)$  and group-like elements of  $D(H)$ . The restricted two-parameter quantum group  $\mathfrak{u}_{r,s}(\mathfrak{sl}_n)$  is a Drinfel'd double under certain conditions on the parameters  $r$  and  $s$ . I use Radford's method and the computer algebra system SINGULAR::PLURAL to construct the simple modules for  $\mathfrak{u}_{r,s}(\mathfrak{sl}_3)$  for different values of  $r$  and  $s$ . (Received September 11, 2006)