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Mark N. Ellingham* (mark.ellingham@vanderbilt.edu), Department of Mathematics, SC 1326, Vanderbilt University, Nashville, TN 37240, and **D. Christopher Stephens** and **Xiaoya Zha**. *The orientable genus of $K_{\ell,m,n}$ with $m \equiv 3 \pmod{4}$ and $n \equiv 2 \pmod{4}$* . Preliminary report.

In 1969 White conjectured that the genus of the complete tripartite graph $K_{\ell,m,n}$, with $\ell \geq m \geq n$, is $\lceil (\ell-2)(m+n-2)/4 \rceil$. The problem naturally breaks into sixteen cases according to the values of m and n modulo 4. Solutions for twelve of these cases are known. Here we discuss recent progress on the remaining four cases, which occur when m is odd and n is even. In particular, we look at the case where $m \equiv 3 \pmod{4}$ and $n \equiv 2 \pmod{4}$, which illustrates many of the techniques also used in the other cases. (Received September 09, 2007)