1123-57-225   **Anar Akhmedov*** (`akhmedov@umn.edu`), Minneapolis, MN 55455, and **Naoyuki Monden** (`monden@isc.osakac.ac.jp`). *Genus two Lefschetz fibrations via lantern substitution.* Preliminary report.

We will construct a family of genus two Lefschetz fibrations $X(n)$ over two sphere by applying a single lantern substitution to the twisted fiber sums of Matsumoto's genus two Lefschetz fibration. We will compute the fundamental group of $X(n)$ and show that it is isomorphic to the trivial group if $n = -3, -1$, $\mathbb{Z}$ if $n = -2$, and $\mathbb{Z}_{|n+2|}$ for all integers $n \neq -3, -2, -1$. This is a joint work with Naoyuki Monden. (Received August 27, 2016)