报告题目：Homotopy of blow ups after looping

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报告摘要：

The blow up construction is fundamental to both complex algebraic geometry and symplectic geometry. The rational homotopy type of blow ups was systematically studied in depth by Lambrechts and Stanley. In contrast, the local homotopy type of blow ups has received little attention.

In this talk, we will study the homotopy theory of blow up construction via two approaches. The first approach introduces and develops fibrewise surgery theory. The second approach is purely homotopy theoretic. In both cases, we prove homotopy decompositions of the based loop spaces on blow ups. We will give several examples. This a joint work with Stephen Theriault.