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Jason Manning (jfmanning@cornell.edu), **Saul Schleimer** (s.schleimer@warwick.ac.uk) and **Henry Segerman*** (segerman@math.okstate.edu). *From veering triangulations to Cannon-Thurston maps*. Preliminary report.

Agol introduced veering triangulations of mapping tori, whose combinatorics are canonically associated to the pseudo-Anosov monodromy. In previous work, Hodgson, Rubinstein, Tillmann and I found examples of veering triangulations that are not layered and therefore do not come from Agol's construction.

However, non-layered veering triangulations retain many of the good properties enjoyed by mapping tori. For example, Schleimer and I constructed a canonical circular ordering of the cusps of the universal cover of a veering triangulation. Its order completion gives the veering circle; collapsing a pair of canonically defined laminations gives a surjection onto the veering sphere.

In work in progress, Manning, Schleimer, and I prove that the veering sphere is the Bowditch boundary of the manifold's fundamental group. As an application we produce Cannon-Thurston maps for all veering triangulations. This gives the first examples of Cannon-Thurston maps that do not come, even virtually, from surface subgroups. (Received August 15, 2020)