

**Oberseminar Geometrie**  
Department of Mathematics  
University of Fribourg  
Lecture room 2.52 Physics  
**Wednesday April 27, 2022, 10:20**



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### **Quasisymmetric gluing and uniformization**

A celebrated theorem of Bonk and Kleiner states that an Ahlfors 2-regular metric sphere  $X$  is quasisymmetrically equivalent to  $S^2$  if and only if  $X$  is linearly locally connected. This theorem has been reproved and extended in various ways. In particular, Lytchak and Wenger provide an alternate proof by using the solution of the Plateau problem in metric spaces.

In this talk, we will apply the result of Lytchak and Wenger and a quasisymmetric gluing theorem of Aseev, Kuzin and Tetenov to derive a version of the Bonk-Kleiner Theorem for surfaces of higher genus. This result is new for surfaces with non-empty boundary. Based on joint work with Martin Fitzi.