Seminar/Talk

GeomTop Seminar: Colin de Verdiere parameter and representations of graphs

Vojtech Kaluza

Host: Uli Wagner

The Colin de Verdiere parameter ?(G) is known to capture some of the embeddability properties of a graph G: For instance, ?(G) ? 3 if and only if G is planar and ?(G) ? 4 if and only if G is linkless embeddable. In order to study topological properties of graphs G with ?(G) > 4, van der Holst and Pendavingh introduced a parameter ?(G). They showed that ?(G) ? k if and only if ?(G) ? k for k = 1, 2, 3, 4. In addition, they proved that ?(G) ? ?(G)+2 for every G and conjectured that ?(G) ? ?(G) in general. They also showed that the two parameters may differ. In this talk, after an introduction on the parameters ? and ?, I plan to present a proof of the aforementioned conjecture of van der Holst and Pen-davingh. This is a joint work with Martin Tancer.

Wednesday, December 11, 2019 01:00pm - 02:15pm
Mondi Seminar Room 3, Central Building