

Geometric structures, compactifications of representation varieties and non archimedean geometry

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In this minicourse we will give an introduction to recent works linking the study of degenerations of geometric structures, coming from specific components of representation varieties of fundamental groups of surfaces, to the study of representations of these groups over real closed fields; in particular there are analogues of symmetric spaces which can be defined over non-archimedean fields and which carry a rich geometric structure. The study of group actions on such spaces can be applied to the study of certain compactifications of their representation varieties.