November 13, 2019: George Lusztig (MIT), Total positivity in Springer fibres

Let u be a unipotent element in the totally positive part of a complex reductive group. We consider the intersection of the Springer fibre at u with the totally positive part of the flag manifold. We show that this intersection has a natural cell decomposition which is part of the cell decomposition (Rietsch) of the totally positive flag manifold.