Asymptotic Convex Geometry is only one component of an emerging interdisciplinary area which deals with high dimensional phenomena and lies on the intersection of geometry analysis, probability and combinatorics. A typically observed phenomenon is the tendency of high dimensional systems to congregate around typical forms. A major result of this form is the Dvoretzky-Milman theorem: All convex bodies (under some natural normalization condition) have the property that a random projection of logarithmic dimension, is almost Euclidean. Recently, some of the major ideas, techniques and results of the theory have found applications to Quantum mechanics, statistical physics, compressed sensing, random algorithm theory, information theory and complexity among others. The theory having its origin in classical convexity and geometric functional analysis is concerned with the geometric and linear properties of finite dimensional normed spaces or convex bodies, the emphasis being on the asymptotic behavior of various quantitative parameters as the dimension grows to infinity. In this course I will try to cover most of the material of the following topics:


4. **Concentration of measure on convex bodies**: \( \log \)-concave measures. A central limit theorem. Hyperplane conjecture and isoperimetry.