

YONSEI BK Geometry Seminar

Shrinkable Surfaces and Local GW Theory from 5d SCFTs

Sungwoo Nam

POSTECH

In this talk, I'll explain a definition of local curve-counting theory, specifically local Gromov-Witten (GW) theory, of some simple normal crossing surfaces (namely, shrinkable surfaces), generalizing local mirror symmetry of a smooth del Pezzo surface. Such generalization is motivated by physics of M-theory on a Calabi-Yau 3-fold containing a simple normal crossing surface and also by 3-fold canonical singularities. I'll first review the background, describe the embeddability problem of shrinkable surfaces, and then discuss how we can apply GW theory to singular surfaces. No knowledge on physics is assumed. This talk is partly based on joint work with S. Katz.

2023. 10. 11. (수) 14 : 00 과학관 225호

주최: 4단계 BK21 수리과학 및 계산 교육연구단 (연세대학교 수학계산학부) 문의: 최성락 <u>sungrakc@yonsei.ac.kr</u> 홍한솔 <u>hansolhong@yonsei.ac.kr</u> 조다혜 <u>dahye.cho@gmail.com</u>