A Course on Saito Theory
12-13 January 2021

Hodge Ideals and Spectrum of Isolated Hypersurface Singularities

This is a series of talks on the paper, Hodge ideals and spectrum of isolated hypersurface singularities, by Seung-Jo Jung, In-Kyun Kim, Morihiko Saito and Youngho Yoon. The spectrum is an important analytic invariant of hypersurface singularities and Hodge ideals are ideal sheaves regarded as a generalization of multiplier ideals. Nero Budur and Morihiko Saito found a relation between spectrum and multiplier ideals. We extend their result to Hodge ideals in case of isolated singularities. There will be 4 hours of talks:

<u>**Tuesday January 12th, 2021**</u>
4:00pm – 5:00pm: Dr. Youngho Yoon from Sungkyunkwan University (Overview)
5:00pm – 6:00pm: Dr. Seung-Jo Jung from Jeonbuk National University (Hodge Ideals)

<u>**Wednesday January 13th, 2021**</u>
4:00pm – 5:00pm: Dr. Youngho Yoon from Sungkyunkwan University (Spectrum)
5:00pm – 6:00pm: Dr. In-Kyun Kim from Yonsei University (Examples)