

## Level Set Methods and Image Processing

Using modern techniques from scientific computing and numerical analysis, natural phenomena or scientific experiment can be simulated effectively with a computer and used for computer graphics, for example as special effects for the film industry and manufacturing the thin film. The Level Set method can make those things happen without a lot of difficulties. This method was devised by Osher and Sethian(1988) to represent dynamically moving interfaces as the zero level set of a scalar function that evolves in time. Since then, many researchers have worked on many applications using a Level Set Method. I will give an introductory talk about the Level Set Method and introduce the PDE based image processing as one of its applications.