- [Home](#)
- [About the CVR](#)
- [News](#)
- [Members](#)
- [Seminar Series](#)
- [Conference](#)
- [Resources](#)
- [CVR Summer School](#)
- [Research Labs](#)
- [Training at the CVR](#)
- [Partnering with the CVR](#)
- [Contact Us](#)

- Friday, March 2, 2007
  A novel approach to the problem of cue integration: the Stereo-Motion

  The current approach to the problem of cue integration in the perception of 3D shape postulates that the outputs of (fairly) independent depth-processing modules are combined in a statistically optimal fashion. An alternative to the modular architecture of the Modified Weak Fusion Model has been proposed by Domini and Caudek (2006) by hypothesizing that the visual system combines the information provided by different image signals (e.g. velocities, disparities, texture gradients ...) /prior/ to the extraction of depth information. Such approach has been termed the Intrinsic Constraint Model. The aim of this presentation is twofold. First, I will carry out an ideal observer analysis showing that the IC model yields optimal performance for the recovery of the affine structure. Second, I will discuss novel empirical findings about perception of structure from stereo and motion signals that are consistent with the predictions of the IC model.

  Fulvio Domini
  Brown University