

**CRUNCH Seminars at Brown, Division of Applied Mathematics**

**Friday – November 16, 2018**

**Background, Clinical Features and Pathogenesis of Diabetic Retinopathy**

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Diabetic retinopathy (DR) is a chronic, progressive and possibly vision-threatening eye disease. Early detection and diagnosis of DR, prior to the development of any lesions, is paramount for more efficiently dealing with it and managing its consequences. This talk will review the current understanding of pathogenesis of DR and a number of candidate geometric and hemodynamic biomarkers, derived from fundus images of the retinal vasculature, which can be reliably utilized for identifying the progression from diabetes to DR.