

CETL-MSOR Conference 2015

Andrew McGettigan & Rich Cochrane: Two-point Linear Perspective & the Mathematics of Viewpoints.

This practical workshop will introduce the drawing-led mathematics being pioneered at Central Saint Martins' Fine Art Maths Centre.

Participants will be introduced to the basics of two-point linear perspective by constructing pavimenti - paving or chessboard patterns where two vanishing points located on the horizon line (line at infinity) determine the convergence of parallel lines that are not parallel to the picture plane.

Features of projective geometry will be demonstrated in this simple setting before we move on to calculate the correct viewpoints so that different pavimenti constructions can be seen as comprised of squares.

Time permitting, we will then move on to construct cubes by calculating the correct positioning of vertical vanishing points above the horizon line.

We will discuss how both techniques can be extended to capture real world features accurately in two-point perspective.

No requisites are needed for this workshop. Please bring a pen, ruler, compass and protractor.