# A SIMPLE METHOD TO PLOT PHOTOELASTIC FRINGES AND PHASEMAPS FROM FINITE ELEMENT RESULTS

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**Abstract**

*Plotting of photoelastic fringes and phasemaps from Finite Element (FE) results enables whole-field visual comparison with experimental results. There have been studies to plot isochromatic and isoclinic fringe contours and phasemaps from FE results earlier, using special, stand-alone, post-processing software, developed on different platforms. In this paper, to simulate photoelastic fringe contours and phasemaps realistically, a new strategy that uses the standard post-processor functionalities available in a commercial FE package is proposed and validated with experimental results. The simplified approach also comes in handy for visualizing the photoelastic fringe patterns in transient problems.*

***Keywords:*** *Digital photoelasticity, plotting of contours, FE validation, Isochromatics, Isoclinics, Inconsistent zones, Transient problems*

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**Paper Code: V62 N3/714-2010.**