Integration of spectral and XRF images for Louvre Iranian manuscript pigment study

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Iranian manuscript “Humayun rencontre la princesse Humay”, Musée du Louvre, has been studied by C2RMF in order to find out color materials. Imaging techniques from UV to IR, added by Raman and XRF analysis, lead to find out pigments used in this 15e century manuscript. As some questions remains, we used calibrated images with Profilocolore software to obtain spectral data and spectral segmentation. Combined with images treatments like PCA and NDVI, some pigments recognitions and locations were resolved. Last part of this presentation is explaining mathematics concepts of those images treatments.