

## ISTITUTO INTERNAZIONALE STUDI AVANZATI DI SCIENZE DELLA RAPPRESENTAZIONE DELLO SPAZIO Geometria proiettiva, Geometria descrittiva, Rilevamento, Fotogrammetria

INTERNATIONAL INSTITUTE FOR ADVANCED STUDIES OF SPACE REPRESENTATION SCIENCES Projective geometry, Descriptive geometry, Survey, Photogrammetry

Palermo, Italia

## Università degli Studi di Palermo

Giuseppe Maria Catalano

## PROSPETTIVA DELLE QUADRICHE

Metodo generale per la rappresentazione assonometrica ortogonale mediante sintesi omologica



1987

## PERSPECTIVE REPRESENTATION OF QUADRIC SURFACES

The eager fascinating wish to represent any quadric non-specialized surface easily and quickly in perspective, putting freely the centre of projection and the table with reference to them, has strongly spurred the research of a clear and concise general method.

Using plane homology, resorting at the same time to the basic ideas of polarity in space and on plain, you recognize the elements (centre, two points and tangent in one of them) for the representation of the conic line, which is the apparent outline of the quadric surface.

We have resorted then to the same ideas of polarity to define the plane sections, applying the perspectivity between two sections of the quadric surfaces chosen at random.