

# **SOLSTICE: An Electronic Journal of Geography and Mathematics.**

(Major articles are  
refereed;  
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available)



## **INTRODUCTION TO THE SPECIAL ISSUE\***

Projective geometry is a non-Euclidean geometry that sits atop all other non-Euclidean geometries. It is the most general geometry and possesses complete symmetry. The infinite is no different from the ordinary. Two points determine a line; two lines determine a point. Indeed, "parallel" lines intersect at a point at infinity (at least to our Euclidean-trained minds). There is complete duality.

Because the academic curriculum is focused almost entirely on Euclidean geometry, the constructions of projective geometry, which are quite beautiful, remain hidden from most. They appear "unnatural" and "non-intuitive." The extra capability of the internet and related software permits animating difficult to visualize projective scenes and the instantaneous sharing of these across a wide range of locales.

This issue of Solstice shares several important projective constructions with readers:

- Harmonic conjugacy
- Constructions associated with conics in the projective plane.
- Desargues's Two-Triangle theorem.

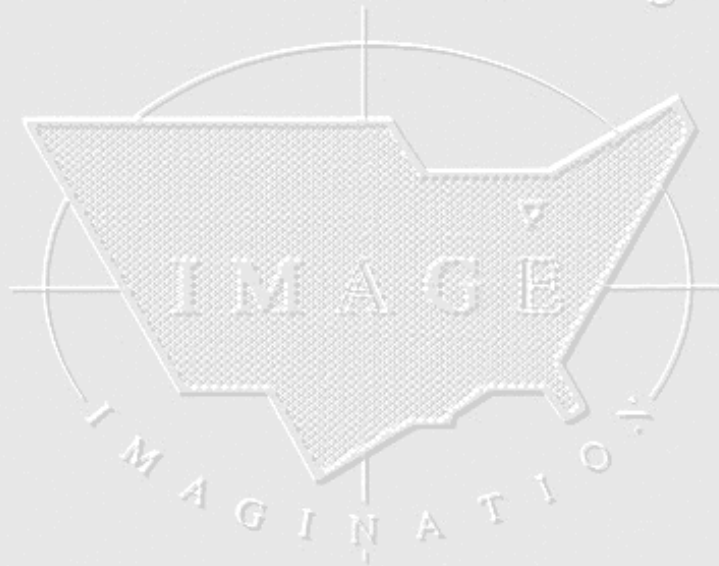
Read about harmonic conjugacy in association with true perspective projections of the globe to a mapping plane. Learn how all perspective mapping is captured by this projective geometric construction!

*\*Dedicated to the memory of Professor H.S.M. Coxeter, 1907-2003.*

- *Solstice* was a Pirelli INTERNETional Award Semi-Finalist, 2001 (top 80 out of over 1000 entries worldwide)
- One article in *Solstice* was a Pirelli INTERNETional Award Semi-Finalist, 2003 (Spatial Synthesis Sampler).
- *Solstice* is listed in the Directory of Open Access Journals maintained by the University of Lund where it is maintained as a "searchable" journal.
- *Solstice* is listed on the journals section of the website of the American Mathematical Society, <http://www.ams.org/>
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- IMaGe is listed on the website of the Numerical Cartography Lab of The Ohio State University: [http://ncl.sbs.ohio-state.edu/4\\_homes.html](http://ncl.sbs.ohio-state.edu/4_homes.html)

**Congratulations to all *Solstice* contributors.**

Institute of Mathematical Geography



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