

# Distributing points on the real projective plane

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In the last decades, the problem of distributing points on spheres and other spaces has attracted the attention of the mathematical community for both its theoretical interest and its numerous practical applications, constituting nowadays a very active field of research (see [2], a monograph containing the most relevant results to date). One of the main open problems in the area is Smale's 7th Problem ([4]), posed by Shub and Smale in [3], which asks for an algorithm for finding a collection of points in the sphere  $\mathbb{S}^2$  whose logarithmic energy is quasioptimal.

While for the sphere  $\mathbb{S}^2$  we have constructive procedures to generate collections of points with low logarithmic energy (see [1]), that is not the case in general for other spaces. In particular, one of the simplest spaces for which there are no such constructive procedures is the real projective plane. In this poster we tackle the problem of distributing points in this last space.

**Joint work with:** Carlos Beltrán, Ujué Etayo.

## References

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