

Dullo

Unique phenomena in nature

$$(x^2 + y^2 + z^2)^2 = x^2 + y^2$$

Mathematics is closely linked to other sciences like physics, chemistry or technology and provides powerful tools to understand the world around us.

For instance, many phenomena we come across when studying nature give rise to models with singularities.

This is the case of the propagation of sound waves produced by the public's enthusiastic applause in a football stadium. This phenomenon takes the form of the Dullo surface. It has a clear singularity in its centre and, therefore, the soccer referee avoids being on this spot on the pitch when a goal is being celebrated. The noise would harm his ears!