1108-53-358 Wendy Goemans* (wendy.goemans@kuleuven.be), KU Leuven, Campus Brussel, Warmoesberg 26, 1000 Brussels, Belgium. Clelia curves in Euclidean and Minkowski 3-space. Preliminary report. In the 18th century, Clelia Grillo Borromeo Arese studied special spherical curves for which the angle coordinates, when the curve is parametrized using spherical coordinates, are linearly dependent. These curves were named after her by Luigi Guido Grandi. Two well-known examples of a Clelia are Pappus' spiral and Viviani's curve. Clelias are also called spherical spirals by some authors.

In this presentation, I draw the attention to Clelias from two viewpoints. On the one hand, Clelias are the links of the cones which are flat twisted surfaces. On the other hand, the intersection of a sphere and Plücker's conoid, is a Clelia.

A twisted surface is traced out by a planar curve that rotates in its supporting plane while simultaneously this supporting plane is rotated about an axis in the plane, possibly at different speeds. Because of the different causal characters of the rotation axis, different parametrizations of twisted surfaces have to be considered in Minkowski 3-space. However, in all cases, a cone over a Clelia is a flat twisted surface.

The construction of Plücker's conoid is translated to Minkowski 3-space. Then, it is shown that a Clelia in Minkowski 3-space is the intersection of a pseudosphere or a pseudohyperbolic space and a kind of Plücker's conoid. (Received January 18, 2015)