The Golden Ratio is one of the best known mathematical constants and its role in art and architecture is also well known. Probably less known is a number, in many ways closely related to the Golden Ratio, and most often referred to as the Plastic Number (sometimes also as the Silver Number).

This number is often linked to the Dutch monk Dom Hans van der Laan, who also was an architect, like his father and two brothers. In the architectural work of van der Laan the number appears as a ratio between dimensions, just as the Golden Ratio has been frequently used.

In this talk I will show some of Dom Hans van der Laan’s work as well as going into the mathematics of the Plastic Number. An interesting observation is that The Plastic Number and the Golden Ratio share a particular number theoretic property. And even more interesting – these two numbers are the only ones that have this particular property! (Received September 16, 2012)