

1040-14-78

Jorge Vitório Pereira* (jvp@impa.br), Estrada Dona Castorina, 110, Jardim Botânico, Rio de Janeiro, 22460-320, Brazil. *The Classification of Exceptional CDQL Webs.*

I will discuss a recent joint work with Luc Pirio (CNRS) about the classification of Completely Decomposable Quasi-Linear webs with the maximal number of abelian relations that are non algebraizable (exceptional CDQL webs for short).

On the projective plane the CDQL webs are the ones formed by the superposition of k pencils of lines and one non-linear foliation. Our classification says that there are four countable infinite families and thirteen sporadic exceptional CDQL webs on \mathbb{P}^2 .

Among the exceptional examples there is \mathcal{H}_{10} , a 10-web obtained by the superposition of the Hesse pencil of cubics and the nine pencils of lines through its base points. Similarly to Bol's classical example of exceptional CDQL 5-web the abelian relations of \mathcal{H}_{10} are functional equations involving logarithms and dilogarithms.

If time allows I will also discuss the classification of exceptional CDQL webs on Abelian Surfaces. Up to isogenies, there are one infinity family, parameterized by a \mathbb{Z}_2 -quotient of the modular curve $X_0(2)$, and three sporadic exceptional CDQL webs on abelian surfaces. (Received January 25, 2008)