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Mariela Carvacho* (mariela.carvacho@usm.cl), Avenida Espana1680, Valparaiso. *Isogenous decomposition of the Jacobian of generalized Fermat curves.*

A closed Riemann surface S is called a generalized Fermat curve of type (p, n) , where $p, n \geq 2$ are integers, if it admits a group $H \cong \mathbb{Z}_p^n$ of conformal automorphisms so that S/H is an orbifold of genus zero with exactly $n + 1$ cone points, each one of order p . It is known that S is a fiber product of $(n - 1)$ classical Fermat curves of degree p and, for $(p - 1)(n - 1) > 2$, that it is a non-hyperelliptic Riemann surface. In this talk, assuming p to be a prime integer. We provide a decomposition, up to isogeny, of the Jacobian variety JS as a product of Jacobian varieties of certain cyclic p -gonal curves.

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