## E. Vargas

Title:

## Metric aspects of the dynamics of covering maps of the circle


#### Abstract

: In a joint work with E. Colli and M. L. do Nascimento we consider a covering map of the circle of degree $\$ \mathrm{~d}$ Igeq $2 \$$ which has a critical point of order $\$$ lell $>1 \$$ and the Fibonacci combinatorics. Then we study the growth of the derivative of the iterates of this map on the critical value and related measure-theoretical properties. The main issue is to control the lack of natural symmetries around the critical point without using complex analysis. The main tool is the expansion of cross ratios under an additional hypothesis of negative Schwarzian to get 2 difference equations involving the derivatives mentioned above.


