

Sixteenth International Conference Zaragoza-Pau on Mathematics and its Applications
Jaca, September 7–9th 2022

Bernstein-Sato polynomials and related invariants for meromorphic functions.

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SUMMARY

We describe a family of Bernstein-Sato polynomials for meromorphic functions, and use them to prove some functional equations as well as some generalizations of classical results by Kashiwara and Lichin. We focus mostly on the use of these Bernstein-Sato polynomials for studying some aspects of the singularities of meromorphic functions like Archimedean zeta functions and multiplier ideals.

Keywords: Bernstein-Sato polynomial, Zeta Functions, Singularities

AMS Classification: 14F10, 32S40, 42B20, 14F18

References

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