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## Puiseux series

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A formal series of the form

$$\sum_{n=m}^{\infty} a_n z^{n/k}$$

where  $m$  and  $k$  are integers such that  $k \geq 1$  is called a *Puiseux series* or a *fractional power series*. Note that if  $k > 1$ , then  $z^{n/k}$  could be multivalued. One example of the use of such a power series is the Puiseux parametrization of one-dimensional complex analytic varieties.

## References

- [1] E. M. Chirka. . Kluwer Academic Publishers, Dordrecht, The Netherlands, 1989.
- [2] Alexandru Dimca. . Vieweg, Braunschweig, Germany, 1987.