AN ANALOGUE OF MAILLET TYPE THEOREM IN CONVOLUTION PARTIAL DIFFERENTIAL EQUATIONS

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In the summability theory of formal solutions of partial differential equations, the study of convolution partial differential equation (briefly, convolution PDE) is very important. In this talk, I will show that the structure of some convolution PDE is quite similar to the one in Maillet type theorem developed in Gerard-Tahara [1]. This will help to simplify the argument in Ouchi [2].

References

- [1] Gerard-Tahara, Singular nonlinear partial differential equations, Vieweg, 1996.
- [2] Ouchi, Multisummability of formal power series solutions of nonlinear partial differential equations in complex domains, Asymptot. Anal. 47 (2006), 187-225.