The Weighted Reverse Poincare Type Inequality for the Difference of Two Parabolic Sub solutions

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Resume. A new type weighted Poincare inequality is established for a difference of two continuous weak parabolic sub solutions of a linear second order uniformly parabolic partial differential equation with constant coefficients in the cylindrical domain.

This inequality asserts that if two continuous weak parabolic sub solutions are close in the uniform norm then their gradients are close in the weighted L2 norm.

References

[1]. M.S.Saleem, K.Shashiashvili, M.Shashiashvili, The Weighted Reverse Poincare Type Inequality for the Difference of Two Parabolic Sub solutions, Mathematica Slovaca, vol.66, No 4, (2016), pp.921-932.