

## OPIAL TYPE INEQUALITIES FOR LINEAR DIFFERENTIAL OPERATORS

GEORGE A. ANASTASSIOU

*Abstract.* Various  $L_p$  form Opial type inequalities ([2]) are given for a Linear Differential Operator  $L$ , involving its related initial value problem solution  $y$ ,  $L y$ , the associated Green's function  $H$  and initial conditions point  $x_0 \in \mathbf{R}$ .

*Mathematics subject classification (1991):* 26D10.

*Key words and phrases:* Opial inequality, linear differential operator.

### REFERENCES

- [1] D. KREIDER, R. KULLER, D. OSTBERG AND F. PERKINS, *An Introduction to Linear Analysis*, Addison-Wesley Publishing Company, Inc., Reading, Mass., U.S.A., 1966.
- [2] Z. OPIAL, *Sur une inégalité*, Ann. Polon. Math. **8** (1960), 29–32.