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- [4] FRANÇOIS-XAVIER LE DIMET AND O. TALAGRAND. “Variational algorithms for analysis and assimilation of meteorological observations: Therotical aspects.” *Tellus*, vol. 38(A):97–110, 1986.
- [5] DURAN, D. “Numerical Methods for Fluid Dynamics: With Applications to Geophysics” *Springer; 2nd Edition*, vol. 2010.
- [6] GILBERT, J-C. AND C. LEMARÉCHAL “Some numerical experiments with variable storage quasi-Newton algorithms.” *Mathematical Programming*, vol. B25: 407–435, 1989.
- [7] GRATTON, S. AND LAWLESS, A. S. AND NICHOLS, N. K. “Approximate Gauss-Newton methods for non-linear least square problems.” *SIAM J. Optimization*, vol. 18: 106–132, 2007.
- [8] HACKBUSCH, W. “Multi-grid Methods and Applications.” *Springer Series in Computational Mathematics*, vol. 1985.
- [9] HEMKER, P.W. “A note on defect correction processes with an approximate inverse of deficient rank.” *Appl. Math. Comp.*, vol. 8: 137–139, 1982.
- [10] IDE, KAYO AND COURTIER, PHILIPPE AND GHIL, MICHAEL AND LORENC, ANDREW C. “Unified notation for data assimilation: Operational, and Variational.” *J. Met. Soc. of Japan*, vol. 75(1B):181-189, 1997.
- [11] MCCORMICK, S. F. “An algebraic interpretation of multigrid methods.” *SIAM J. Num. Anal.*, vol. 19: 548–560, 1982.
- [12] ROBERT MICHAEL LEWIS AND STEPHEN G. NASH. “Model problems for the multi-grid optimization of systems governed by differential equations.” *SIAM J. SCI. COMPUT.*, vol. 26(6):1811–1837, 2005.
- [13] STEPHEN G. NASH. “A multigrid approach to discretized optimization problems.” *Journal of Optimization Methods and Software*, vol. 14:99–116, 2000.
- [14] SOUTHWELL, R. V “Relaxation Methods in Theoretical Physics.” *Oxford University Press, Technical Report*, vol. 1946.
- [15] SOUTHWELL, R. V “Stress-Calculation in Frameworks by the Method of "Systematic Relaxation of Constraints.” *Proceedings of the Royal Society of London. Series A, Mathematical and Physical Sciences*, vol. 151: 56–95, 1935.
- [16] SHLOMO. TA’ASAN. “One shot methods for optimal control of distributed parameters systems i: Finite dimensional control.” *Technical Report No 91-2, ICASE Report*, 1991.
- [17] SHLOMO. TA’ASAN. “Multigrid one-shot methods and Design Strategy.” *Carnegie Mellon University*, 1997.
- [18] TRANGENSTEIN, J., “Numerical solution of hyperbolic partial differential equations.” *Cambridge University Press*, 2007.
- [19] ULRICH TROTTEBERG, CORNELIS W. OOSTERLEE, AND ANTON SCHÜLLER. “Multigrid” *Academic Press*, 2001.
- [20] YAVNEH, IRAD AND DARDYK, GREGORY “A multilevel nonlinear method” *SIAM J. SCI. COMPUT.*, vol. 28: 24–46, 2006.