

ORDER AMONG POWER OPERATOR MEANS WITH CONDITION ON SPECTRA

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Abstract. As a continuation of our previous considerations about the order among power operator means [Linear Algebra Appl. 434 (2011), 1228–1237], we observe this order for other cases.

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REFERENCES

- [1] T. FURUTA, J. MIČIĆ HOT, J. PEČARIĆ, Y. SEO, *Mond-Pečarić Method in Operator Inequalities*, Element, Zagreb, 2005.
- [2] F. HANSEN, J. PEČARIĆ AND I. PERIĆ, *Jensen's operator inequality and it's converses*, Math. Scand. **100** (2007), 61–73.
- [3] J. MIČIĆ, Z. PAVIĆ AND J. PEČARIĆ, *Jensen's inequality for operators without operator convexity*, Linear Algebra Appl. **434** (2011), 1228–1237.
- [4] J. MIČIĆ AND J. PEČARIĆ, *Order among power means of positive operators, II*, Sci. Math. Japon. **71** (2010), 93–109.
- [5] J. MIČIĆ, J. PEČARIĆ AND Y. SEO, *Function order of positive operators based on the Mond-Pečarić method*, Linear Algebra Appl. **360** (2003), 15–34.
- [6] J. MIČIĆ, J. PEČARIĆ AND Y. SEO, *Converses of Jensen's operator inequality*, Oper. Matrices **4** (2010), 385–403.
- [7] B. MOND, J. PEČARIĆ, *Converses of Jensen's inequality for several operators*, Revue d'analyse numer. et de théorie de l'approxim. **23** (1994), 179–183.
- [8] J. PEČARIĆ AND J. MIČIĆ, *Some functions reversing the order of positive operators*, Linear Algebra Appl. **396** (2005), 175–187.