

## **Some recent results on iterations based on cophypomonotone operators**

Jean-Christophe Pesquet

Recent developments on iterative methods involving neural models have attracted growing interest in non-monotone operators. (Co)-Hypomonotone operators generalize, in the operator-theoretic setting, the notion of weak convexity. In this talk, we present recent results on the use of such operators within splitting algorithms for solving inclusion problems. We also discuss applications to inverse problems, in particular in the context of data-driven approaches.