Algorithm 1: Numerical algorithm using subgradient method

Input: $\mathbf{X}, \mathbf{Y}, \lambda$

Output: $\mathbf{A}, \mathbf{B}$

while *value of objective function* (8) *not converged* **do**

- For fixed $\mathbf{B}$, solve $\mathbf{A}$ by SVD as in Procrustes problem indicated by (9).
- **while** $\mathbf{B}$ *not converged* **do**
  - **for** *each* l **do**
    - solve $\mathbf{B}^l$ by (13)
  - check whether $\mathbf{B}$ has converged
- check whether objective function has converged