

# Supplements for “Generalized tensor-response model with multi-sided covariates”

## 1 Proofs

*Proof of Theorem 1.* The following property shows that Bernoulli distribution belongs to the sub-Gaussian family with a subgaussianity parameter  $\sigma$  equal to  $1/4$ .

Suppose  $x \sim \text{Bernoulli}(p)$ , then  $x \sim \text{sub-Gaussian}(\frac{1}{4})$ . □