Algorithm 1: CONTENT-PARTITIONED MULTINETWORK EMBEDDINGS

Data: Message-Word Matrix, Dictionary, Edge Matrix, Number of Topics, Node Covariates, Latent Dimensions, Number of Clusters, α, β

INITIALIZE ALL VARIABLES

for $i \in$ **1:Samples do**

    SAMPLE TOKEN TOPIC ASSIGNMENTS

    SAMPLE TOPIC CLUSTER ASSIGNMENTS

    ADJUST METROPOLIS HASTINGS CONTROL PARAMETERS

    for $m \in$ **1:Metropolis-Hastings Iterations do**

        for $c \in$ **1:Clusters do**

            SAMPLE CLUSTER LATENT SPACE PARAMETERS

        end

    end

end