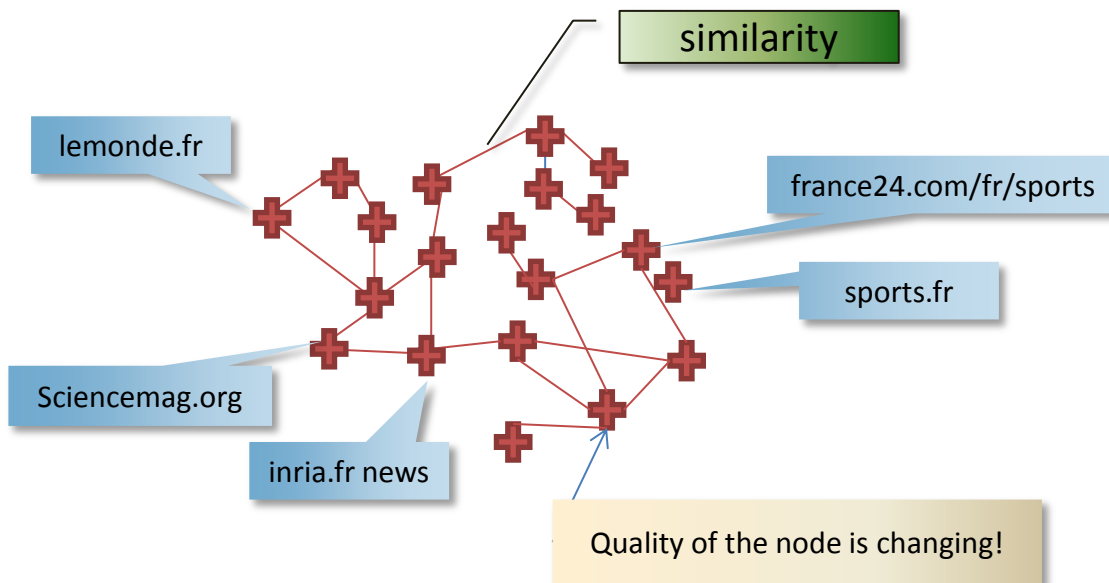


# FINITE-TIME ANALYSIS OF KERNELISED CONTEXTUAL BANDITS

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- **recommendation** of interesting RSS articles
- leverage on **similarity** (kernels) between the feeds
- regularized linear **bandits** in the dual (RKHS) space
- **frequentist** finite-time analysis



- *effective*  
dimension  $\tilde{d}$
- *regret*  $O\left(\sqrt{\tilde{d}T}\right)$
- *improvement*  
upon GP-UCB