Corrected VCOMP Proof

1. The proof of soundness written in the TR of VCOMP at the end of Section 3 is incorrect. The first assumption in the VCOMP rule was transcribed incorrectly. I have rewritten it here:

The property SEM-COMP can be used to prove the soundness of VCOMP. If $L_3 \leq_S L_2 \oplus \|N\|L_2$ and $L_2 \leq_R L_1 \oplus \|M\|L_1$, then by monotonicity and transitivity we get:

$$L_3 \leq_{RoS} L_1 \oplus \|M\|L_1 \oplus \|N\|(L_1 \oplus \|M\|L_1).$$

Applying SEM-COMP on the right-hand side of $\oplus$, we get:

$$L_3 \leq_{RoS} L_1 \oplus \|M\|L_1 \oplus \|M \oplus N\|L_1.$$ 

This can be further rewritten by exploiting the fact that $\|M\|L_1 \leq_{id} \|M \oplus N\|L_1$ together with LLE-IDEMPOTENT, which allows us to conclude:

$$L_3 \leq_{RoS} L_1 \oplus \|M \oplus N\|L_1.$$