<Paragraph 1> The paper investigates the Friendship Paradox (FP) and Generalized Friendship Paradox (GFP) in signed social networks containing both positive (friend/trust) and negative (foe/distrust) links. The FP states that on average, an individual's friends tend to have more friends than the individual. The GFP extends this to other node characteristics positively correlated with degree. Most existing FP/GFP work has focused only on positive links, while this paper studies the paradoxes in the context of negative links as well. </Paragraph 1>

<Paragraph 2> The authors propose first-order and second-order "signed neighbor paradox" metrics to analyze the relationships between nodes' positive and negative degrees/neighbors in signed networks. The first-order metrics compare an individual's positive/negative degree to the average positive/negative degrees of its positive/negative neighbors. The second-order metrics compare the average positive/negative degrees of an individual's positive neighbors to those of its negative neighbors. </Paragraph 2>

<Paragraph 3> The proposed metrics are analyzed empirically across five signed network datasets covering online interactions like Bitcoin trading, Wikipedia elections, and product reviews as well as an offline physical network. The results reveal insights like negative links exhibiting a weaker paradox than positive links, individuals tending to give more negative links than their "negative neighbors", and the paradox effects generally strengthening over time as nodes age in the network. </Paragraph 3>