## Exercise Sheet 11 COMP6741: Parameterized and Exact Computation

## 2016, Semester 2

1. Show that Path Packing has no polynomial kernel unless  $NP \subseteq coNP/poly$ .

## PATH PACKING

Input: A graph G and an integer k

Parameter: k

Question: Are there k pairwise vertex-disjoint paths of length at least k each?