



Setting up ESPResSo for FFS sampling with FRESHS

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1 Introduction

Welcome to the forward flux sampling (FFS) ESPResSo tutorial!

This tutorial assumes basic ESPResSo and FFS knowledge. We will use the software package FRESHS which so far has three rare event sampling techniques implemented, namely SPRES, FFS and PERMFFS. We will focus on the direct FFS method (sometimes called dFFS in the literature) to drive a system through a transition. General instructions for arbitrary rare event systems will be accompanied by a model system of unbiased polymertranslocation. First we will discuss how to setup the FRESHS server and client configurations, as shown in Sec. 2.

2 FRESHS Setup

3 Changes to your simulation script

4 Running your simulation

5 Obtaining transition rates and interface statistics