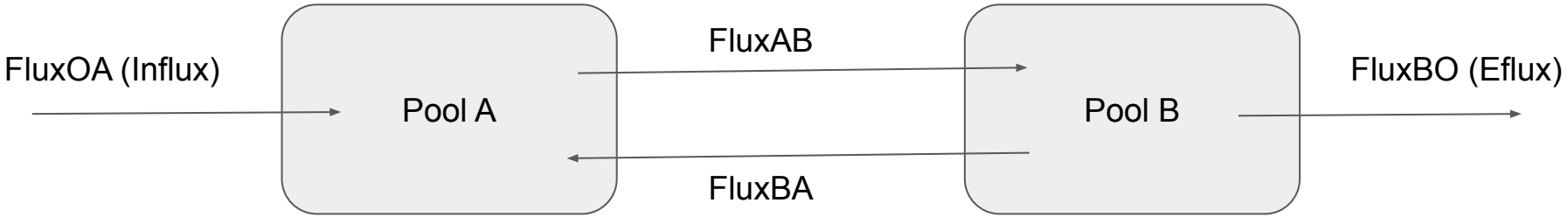
Simple Two-Pool Dynamic Model



Pool A is Constant Size
Pool B is Constant Size
Concentration in Pool A, [A] = Quantity of Solute in Pool A / Size of Pool A
Concentration in Pool B, [B] = Quantity of Solute in Pool B / Size of Pool B
FluxOA (Influx) of Solute = Constant Quantity
FluxAB is Michaelis-Menten Form FluxAB = VmaxAB / (1 + (KmAB / [A]))
FluxBA is Michaelis-Menten Form FluxBA = VmaxBA / (1 + (KmBA / [B]))
FluxBO (Eflux) of Solute is Michaelis-Menten Form FluxBO = VmaxBO / (1 + (KmBO / [B]))
Where VmaxAB, VmaxBA, VmaxBO, KmAB, KmBA, KmBO, and FluxOA are all preset constants
Flux rates are system of ode's, solved over time to produce instantaneous flux rates and Solute quantities.