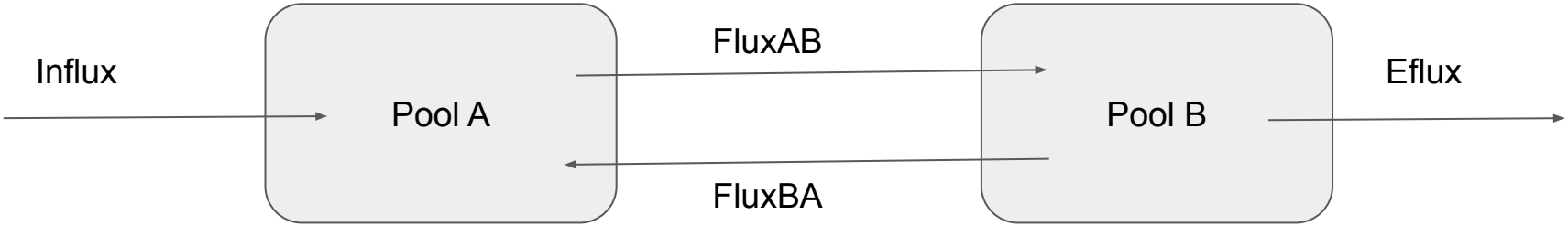
Simple Two-Pool Dynamic Model



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
Influx of Solute = Constant Quantity (Kinflux)
FluxAB is Michaelis-Menten Form Flux AB = VmaxAB / (1 + (KmAB / [A]))
FluxBA is Michaelis-Menten Form Flux BA = VmaxBA / (1 + (KmBA / [B]))
Eflux of Solute = Mass-action kinetic Quantity of Solute in Pool B * Constant (Keflux)
Where VmaxAB, VmaxBA, KmAB, KmBA, and Kefflux are all preset constants
Flux rates are ode's, solved over time to produce instantaneous flux rates and Solute quantities.