Plotting model manifolds

Remember to not loop over the times: exp({1,2,3}) = [e^1,e^2,e^3]

```
y[θ_][t_] := 1 / Length[θ] Sum[Exp[-θ⟦n⟧ t], {n, 1, Length[θ]}]
ParametricPlot3D[{y[{θα, θβ}][...], y[...][...], ...},
 {θα, 0., 10.}, {θβ, 0.0, 10}, PlotRange → {{0, 1}, {0, 1}, {0, 1}}]

M = 10 000; (* or other large number *)
th2s = 10 ^ (-2 + 4 RandomReal[1, {M, 2}]);
(* Gives rho(x) \sim 1/x in [10^-2, 10^2] *)
points = Table[{y[th2s⟦m⟧][1 / 3], y[...][...], ...}, {m, 1, Length[th2s]}];
ListPointPlot3D[points, PlotRange → {{0, 1}, {0, 1}, {0, 1}}, BoxRatios → {1, 1, 1}]

th7s = 10 ^ (... [ ..., {M, 7}]);
points = Table[...];
ListPointPlot3D[ ...]

ts = Table[t, {t, 0, 10, 0.5}];
(* Avoid error messages for underflow for late times, fast decays *)
Off[General::munfl];
points = Table[...];
pca2 = PrincipalComponents[points];
pcaBiggest = pca2⟦All, 1 ;; 3⟧;
ListPointPlot3D[pcaBiggest, PlotRange → {{-1, 3}, {-1, 1}, {-1, 1}},
 BoxRatios → {2, 1, 1}, ViewPoint → Above]

points = Table[...];
pca7 = ...;
pcaBiggest = ...;
ListPointPlot3D[pcaBiggest, PlotRange → ..., BoxRatios → ..., ViewPoint → Above]
pcaNextThree = ...;
zoom = ...;
ListPointPlot3D[pcaNextThree,
 PlotRange → {{-zoom, zoom}, {-zoom, zoom}, {-zoom, zoom}},
 BoxRatios → {1, 1, 1}, ViewPoint → Above]
```