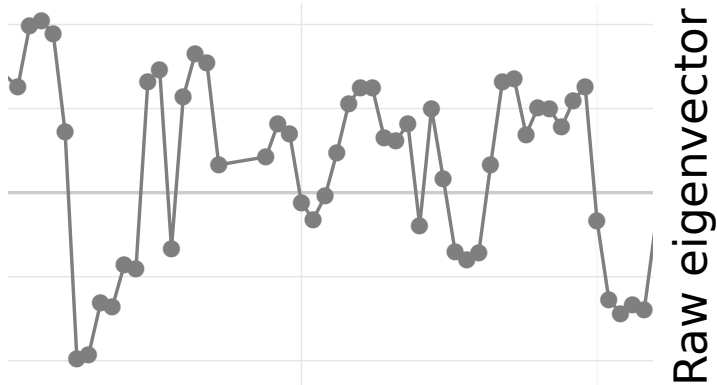
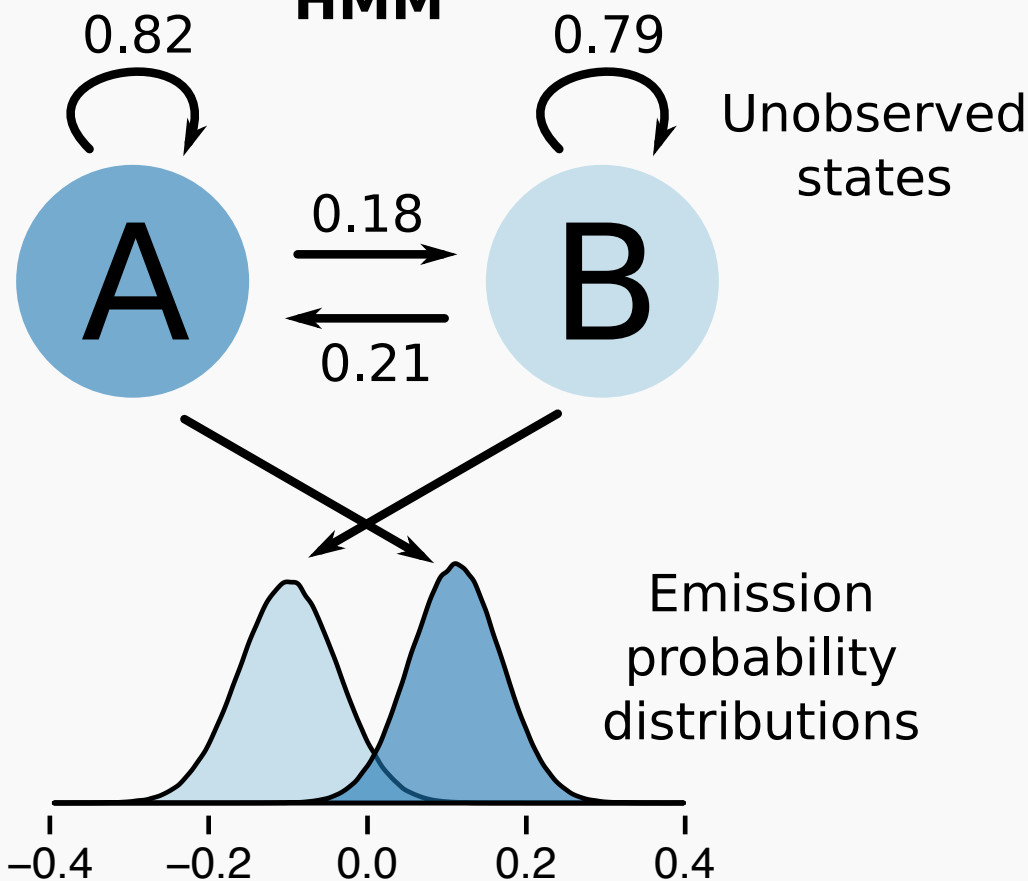


Input



HMM



Output

