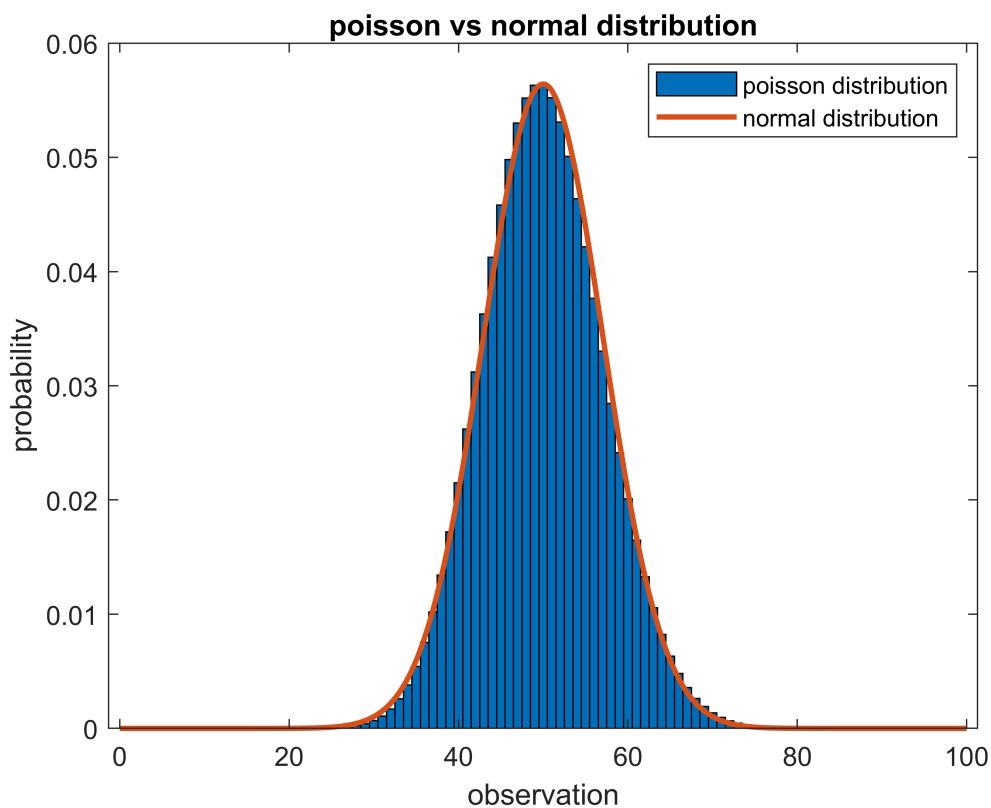


```
lambda = 50;  
x = 0:100;  
y = poisspdf(x, lambda);
```

```
mean = lambda;  
sigma = sqrt(lambda);  
x1 = 0:0.1:100;  
y1 = normpdf(x1, mean, sigma);
```

```
figure  
bar(x, y, 1)  
hold on  
plot(x1, y1, 'LineWidth',2)  
xlabel('observation')  
ylabel('probability')  
title('poisson vs normal distribution')  
legend('poisson distribution', 'normal distribution')  
hold off
```



```
lambda = 2;  
x = 0:20;  
y = poisspdf(x, lambda);
```

```
mean = lambda;
```

```

sigma = sqrt(lambda);
x1 = 0:0.1:20;
y1 = normpdf(x1, mean, sigma);

```

```

figure
bar(x, y, 1)
hold on
plot(x1, y1, 'LineWidth', 2)
xlabel('observation')
ylabel('probability')
title('poisson vs normal distribution')
legend('poisson distribution', 'normal distribution')
hold off

```

