

Means, $\mu_k =$

```
[[ -4.52626937 -0.22678776]
 [ 14.12714489  0.65857205]
 [-17.89448891  1.72198191]]
```

Covariance, $\Sigma_k =$

```
[[[ 4.05789322e+01 -3.77094113e+00]
  [-3.77094113e+00  9.92850884e-01]]
```

```
[[ 7.22052961e+00 -3.63551767e-01]
 [-3.63551767e-01  6.64943537e-01]]
```

```
[[ 2.74289443e-01  6.37107978e-02]
 [ 6.37107978e-02  2.13535013e-02]]]
```

Mixing Coefficients, $w_k = [0.74940501 \ 0.24596741 \ 0.00462759]$

PCA plot:

