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> restart:readlib(mtaylor):
> dX[1] := sigma[1]*dW[1] + a[1]*dt;
> dX[2] := sigma[2]*dW[2] + a[2]*dt;
      dX1 := σ1dW1 + a1dt
      dX2 := σ2dW2 + a2dt
> xp1 := mtaylor( arctan( (X[2]+dX[2])/(X[1]+dX[1]) )
> - arctan(X[2]/X[1]), [dt,dW[1],dW[2]], 3, [2,1,1]):
> xp2 := subs(dW[1]^2 = dt, dW[2]^2=dt, xp1 ):
> xp2 := subs( dW[1] = rho*dW[2], xp2):
> xp2 := subs( dW[2]^2 = dt, xp2):
> drift := normal( coeff( xp2, dt,1 ) ) ;
drift := 
$$-\frac{-a_2X_1^3 - a_2X_1X_2^2 + X_2a_1X_1^2 + X_2^3a_1 - X_2\sigma_1^2X_1 + \sigma_2\sigma_1\rho X_1^2 - \sigma_2\sigma_1\rho X_2^2 + \sigma_2^2X_2X_1}{(X_1^2 + X_2^2)^2}$$


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