```
void ex2(){
    gRandom->SetSeed();

    TH1F *h0 = new TH1F("h0", "histo0", 500, 0, 5);
    TH1F *h1 = new TH1F("h1", "histo0", 500, 0, 5);
    TH1F *sum = new TH1F("sum", "sum0", 500, 0, 5);

    for(int i = 0; i < 10e6; i++){
        float x = gRandom->Gaus(2.5, 0.25);
        h0->Fill(x);
    }
    for(int i = 0; i < 10e5; i++){
        float x = gRandom->Exp(1);
        h1->Fill(x);
    }

    h0->Sumw2();
    h1->Sumw2();
    sum -> Add(h0,h1,1,1);

    TF1 *fit = new TF1("fit", "[0]*exp(-0.5 *(x-[1])/[2] *(x-[1])/[2]) + [3] * (1/[4]) *
exp(-x/[4])");

    fit->SetParameter(1, 2.5);
    fit->SetParameter(2, 0.25);
    fit->SetParameter(4, 1.);

    sum->Fit(fit, "Q");
    sum->Draw();

  std::cout << "Par[0]: " << fit->GetParameter(0) << " +/- "<< fit->GetParError(0) << '\n';
  std::cout << "Par[1]: " << fit->GetParameter(1) << " +/- "<< fit->GetParError(1) << '\n';
  std::cout << "Par[2]: " << fit->GetParameter(2) << " +/- "<< fit->GetParError(2) << '\n';
  std::cout << "Par[3]: " << fit->GetParameter(3) << " +/- "<< fit->GetParError(3) << '\n';
  std::cout << "Par[4]: " << fit->GetParameter(4) << " +/- "<< fit->GetParError(4) << '\n';
  std::cout << "Chisquare/DOF: " << (fit->GetChisquare()) / (fit->GetNDF())<< '\n';
}
```