```
#include <iostream>
#include <fstream>
#include "TChain.h"
#include "TMath.h"
#include "Tobject.h"
#include <TH1.h>
#include <TStyle.h>
#include <TCanvas.h>
#include <vector>
using std::vector;

void new_fit(){
  TFile *fileData = TFile::Open("sc_data.root");
  TFile *fileMC1 = TFile::Open("sc_WZ.root");
  TFile *fileMC2 = TFile::Open("sc_ZZ.root");

  TH1F* data = (TH1F*) fileData->Get("M_T(WZ)");    // data histogram
  TH1F* mc1 = (TH1F*) fileMC1->Get("M_T(WZ)");     // first MC histogram
  TH1F* mc2 = (TH1F*) fileMC2->Get("M_T(WZ)");     // second MC histogram



  TObjArray *mc = new TObjArray(2);        // MC histograms are put in this array
  mc->Add(mc1);
  mc->Add(mc2);
  TFractionFitter* fit = new TFractionFitter(data, mc); // initialise
  fit->Constrain(1,0.0,1.0);               // constrain fraction 1 to be between 0 and 1
  fit->SetRangeX(7,22);                    // use only from the 7th bin to 22th that has non zero entry.
  Int_t status = fit->Fit();               // perform the fit
  std::cout << "fit status: " << status << std::endl;
  if (status == 0) {                       // check on fit status
    TH1F* result = (TH1F*) fit->GetPlot();
    data->Draw("Ep");
    result->Draw("same");
  }
}
```