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Subject: Field maps in Macros

Posted by [Mohammad Al-Turany](#) on Tue, 01 Dec 2009 18:31:44 GMT

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Hi,

I have simplified the PndMultiField, it has now a new ctor:

PndMultiField(TString Map)

The Map can be:

#### 1. Full

which is equivalent to adding all maps in the macro i.e:

```
PndDipoleMap *map_d1= new PndDipoleMap("DipoleMap1", "R");
PndDipoleMap *map_d2= new PndDipoleMap("DipoleMap2", "R");
PndSolenoidMap *map_s1= new PndSolenoidMap("SolenoidMap1", "R");
PndSolenoidMap *map_s2= new PndSolenoidMap("SolenoidMap2", "R");
PndSolenoidMap *map_s3= new PndSolenoidMap("SolenoidMap3", "R");
PndSolenoidMap *map_s4= new PndSolenoidMap("SolenoidMap4", "R");
AddField(map_t);
AddField(map_d1);
AddField(map_d2);
AddField(map_s1);
AddField(map_s2);
AddField(map_s3);
AddField(map_s4);
```

#### 2. Dipole:

equivalent to:

```
PndDipoleMap *map_d1= new PndDipoleMap("DipoleMap1", "R");
PndDipoleMap *map_d2= new PndDipoleMap("DipoleMap2", "R");
AddField(map_d1);
AddField(map_d2);
```

#### 3. Solenoid:

equivalent to

```
PndSolenoidMap *map_s1= new PndSolenoidMap("SolenoidMap1", "R");
PndSolenoidMap *map_s2= new PndSolenoidMap("SolenoidMap2", "R");
PndSolenoidMap *map_s3= new PndSolenoidMap("SolenoidMap3", "R");
PndSolenoidMap *map_s4= new PndSolenoidMap("SolenoidMap4", "R");
AddField(map_s1);
AddField(map_s2);
AddField(map_s3);
AddField(map_s4);
```

so in the macro one can simply write:

```
Quote: //-----Create and Set the Field(s)-----  
PndMultiField *fField= new PndMultiField("FULL");  
fRun->SetField(fField);
```

also the parameter handling for the field is done now in the field itself so the lines:

```
(PndMultiFieldPar*) rtdb->getContainer("PndMultiFieldPar");  
if(fField) { fieldPar->SetParameters(fField); }  
fieldPar->setInputVersion(fRun->GetRunId(),1);  
fieldPar->setChanged(kTRUE);
```

are not needed any more (see macro/run/run\_sim.C )

regards

Mohammad