

```
GP[i_,j_][ξ_] := Expand[ξ/.{u[j]:(1-t[i]) u[i]+t[i] u[j],  
f[v[j]]:(f(1-t[i]) v[i]+f[t[i] v[j]+(t[i]-1) (t[i] ∂t[i] f-t[j] ∂t[j] f)] u[i]+f[t[i] v[j]+(t[i]-1) (t[i] ∂t[i] f-t[j] ∂t[j] f)] u[i])}]
```