proposed move to System F

At the Manticore meeting on 11/7/07, we discussed moving BOM in the direction of System F.

The following summarize the proposed changes to the <code>BOM</code> module:

**New syntactic forms:**

- `let x : τ = y [τVec]`
- `apply f [τVec] (...) / (...)`
- `let x : τ = CONS [τVec] (...)`
- `let x : τ = CONST [τVec]`
- `throw k [τ] (...)`

**New types:**

- `α (* type variables *)`
- `forall αVec . τ`
- `T [τVec]`
- `τ + τ`

Here are the changes to the datatypes in the <code>BOM</code> module:

```plaintext
datatype term
  = ...

  E_Apply of (var * ty list * var list * var list)

  E_Throw of (var * ty list * var list)

  E_HLOp of (hlop * ty list * var list * var list)
```

and `rhs`

```plaintext
  = ...

  E_TyApply of (var * ty list)

  E_DCon of (data_con * ty list * ty list)
```

and `lambda` = `FB of`

```plaintext
  Unknown macro: { f }
```

and `pat`

```plaintext
  = P_DCon of (data_con * ty list * var list)

  P_DConst of (data_con * ty list)
```

and the changes to the BOMTy module:

```plaintext
datatype ty
  = T_Var of ty_var

  T_Forall of (ty_var list * ty)

  T_TyCon of (tyc * ty list)
```

We'll also need to add the <code>ty_var</code> type and make changes to the representation of <code>tyc</code>s.