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

New types:

- `alpha (* type variables *)`
- `forall alphaVec . tau`
- `T [tauVec]`
- `tau + tau`

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

datatype term

```plaintext
= ...
```

| 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:

datatype ty

```plaintext
= 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>`.