API and ABI Versioning

CPython exposes its version number in the following macros. Note that these correspond to the version code is **built** with, not necessarily the version used at **run time**.

See :ref:`stable` for a discussion of API and ABI stability across versions.

```
.. c:macro:: PY_VERSION_HEX

   The Python version number encoded in a single integer.

   The underlying version information can be found by treating it as a 32 bit
   number in the following manner:

   +-------+------------------------+-------------------------+-------------------------+
   | Bytes | Bits (big endian order)| Meaning                 | Value for ``3.4.1a2``   |
   +=======+========================+=========================+=========================+
   |   1   |         1-8            |   ``PY_MAJOR_VERSION``  | ``0x03``                |
   +-------+------------------------+-------------------------+-------------------------+
   |   2   |         9-16           |   ``PY_MINOR_VERSION``  | ``0x04``                |
   +-------+------------------------+-------------------------+-------------------------+
   |   3   |        17-24           |   ``PY_MICRO_VERSION``  | ``0x01``                |
   +-------+------------------------+-------------------------+-------------------------+
   |   4   |        25-28           |   ``PY_RELEASE_LEVEL``  | ``0xA``                 |
   +       +------------------------+-------------------------+-------------------------+
   |       |        29-32           |   ``PY_RELEASE_SERIAL`` | ``0x2``                 |
   +-------+------------------------+-------------------------+-------------------------+

   Thus ``3.4.1a2`` is hexversion ``0x030401a2`` and ``3.10.0`` is
   hexversion ``0x030a00f0``.

   This version is also available via the symbol :data:`Py_Version`.
```

```
.. c:var:: const unsigned long Py_Version

   The Python runtime version number encoded in a single constant integer, with
   the same format as the :c:macro:`PY_VERSION_HEX` macro.
   This contains the Python version used at run time.

   .. versionadded:: 3.11
```

All the given macros are defined in :source:`Include/patchlevel.h`.