## **Astronomy 322**

## Some "Getting Started" References for Six Branches of Non-optical Astronomy

In general, I give one "Scientific American" level reference, then one or more review articles.

## 1.) Infrared astronomy

Two articles on IRAS in *Ann. Rev. Astron. and Astrophys.*, **25**, 1987 (by Beichman and by Soifer *et al.*); see also Genzel and Cesarsky, *Ann. Rev. Astron. and Astrophys.* **38**, p. 761.

Skim the last two chapters of *Infrared Astronomy*, eds. Mampaso et al., 1993.

SIRTF Science Center, http://sirtf.caltech.edy/science/index.shtml.

#### 2.) γ-ray astronomy:

Powell, Scientific American, May 1993 (copy on reserve).

Gehrels et al., Scientific American, Dec. 1993 (copy on reserve).

Schonfelder (ed.) the Universe in Gamma Rays, Chaps. 4, 6, 8, 12-15.

Ramana Murthy and Wolfendale, Gamma-ray Astronomy, 1986 (on reserve).

GLAST: http://glast.gsfc.nasa.gov/science/overview.

## 3.) High energy cosmic rays:

Cronin, Gaisser and Swordy, Scientific American, Jan. 1997 (copy on reserve).

Schlickheiser (ed.) *Cosmic Ray Astrophysics*, Chap. 2, 4 and 6.

#### 4.) **Neutrino astronomy**:

Bahcall, Scientific American, July 1969 (copy on reserve).

Bahcall, *Science*, **147**, p. 115, 1965 (copy on reserve).

Haxton, Ann. Rev. Astron. & Astrophys., 33, p. 459.

#### 5.) Gravity wave astronomy:

Weber, *Scientific American* (copy on reserve).

Tyson and Gifford in Lamb, *High Energy Astrophysics*, 1985, p. 297 (on reserve).

J. Weber's book on *Gravity Waves* (out of date and technical).

Two Web sites on planned experiments—

LIGO (http://xxx.lanl.gov/abs/gr-qc/9502013)

LISA (http://lisa.gsfc.nasa.gov/Science/Science.htm).

# 6.) Dark matter "astronomy":

Tayler, The Hidden Universe, 1991.