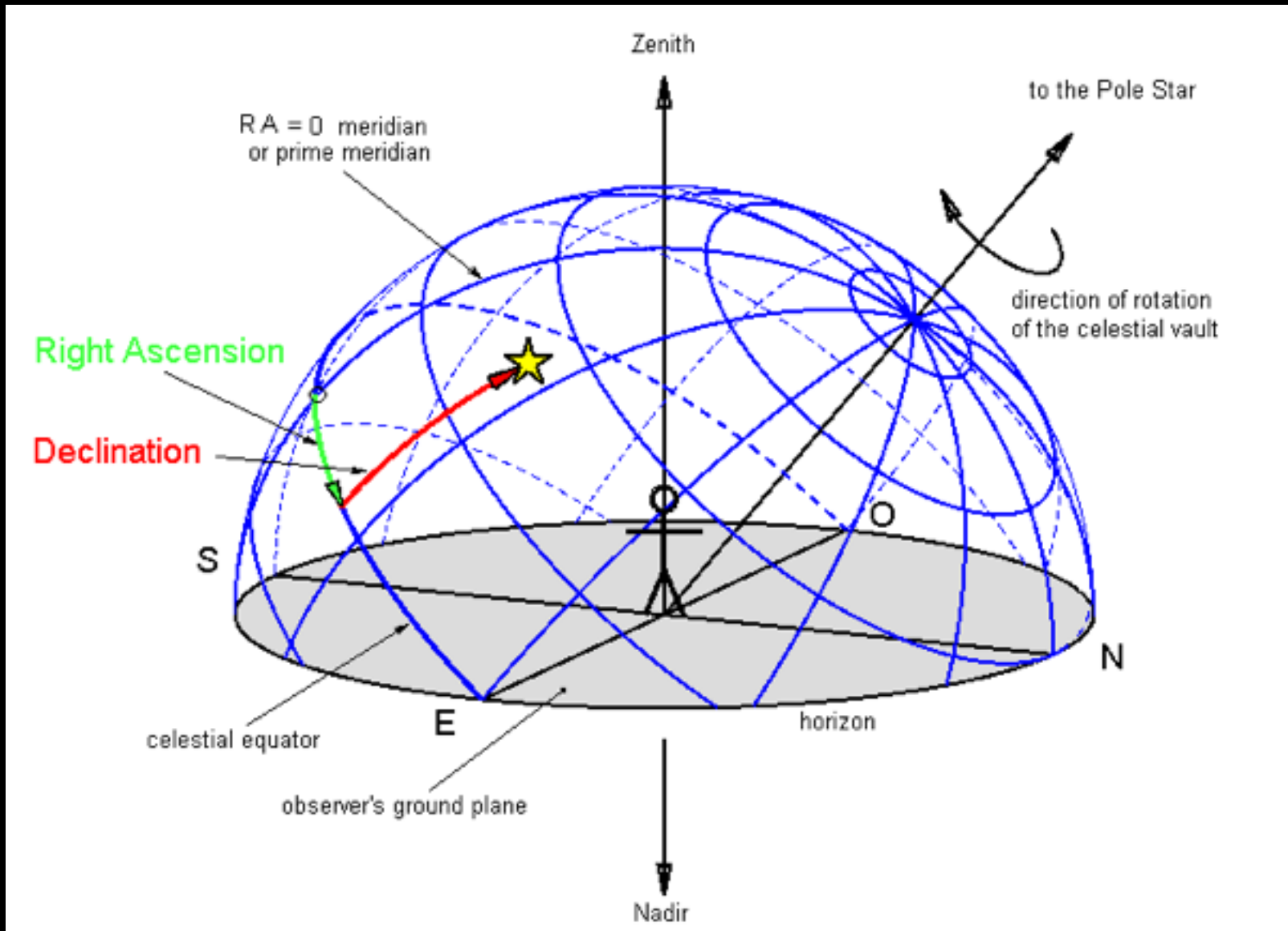


Equatorial Coordinates Review



Ast 401/Phy 580
Fall 2015

Equatorial Coordinates



Hour Angle

Numerically it's the $LST - RA$.

Conceptually, it's the amount of time after a star has reached the meridian. If negative, it hasn't happened yet.

All stars at a given RA have the same hour angle at a given instant of time.

Hour Angle

What is the hour angle of a star due east on the horizon?

A. -12^{hr}

B. -6^{hr}

C. -3^{hr}

D. It depends upon your latitude.

Hour Angle

What is the hour angle of a star due east on the horizon?

A. $-12^{\text{ hr}}$

B. $-6^{\text{ hr}}$

C. $-3^{\text{ hr}}$

D. It depends upon your latitude.

Hour Angle

What is the hour angle of a star that is due north on the horizon?

A. ± 12 hr

B. 0 hr

C. +6 hr

D. It depends upon your latitude.

Hour Angle

What is the hour angle of a star that is due north on the horizon?

A. ± 12 hr

B. 0 hr

C. +6 hr

D. It depends upon your latitude.

Where Are You?

If the celestial equator is on the horizon in all directions, you are likely at:

- A. The north pole
- B. The south pole
- C. The equator
- D. The Bronx

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Where Are You?

If a star on the celestial equator passes north of the zenith, you must be:

- A. At the north pole
- B. In the northern hemisphere
- C. In the southern hemisphere
- D. On the moon.

Where Are You?

If a star on the celestial equator passes north of the zenith, you must be:

- A. At the north pole
- B. In the northern hemisphere
- C. In the southern hemisphere
- D. On the moon.

Ecliptic

If you are in Flagstaff, a planet on the meridian will always be:

- A. South of the zenith
- B. North of the zenith.

Ecliptic

If you are in Flagstaff, a planet on the meridian will always be:

A. South of the zenith

B. North of the zenith.

Ecliptic

If you're on the equator, a planet on the meridian will always pass:

- A. North of the zenith
- B. South of the zenith
- C. Depends upon the date

Ecliptic

If you're on the equator, a planet on the meridian will always pass:

- A. North of the zenith
- B. South of the zenith
- C. Depends upon the date

Having problems with RA, DEC, ETC?

COORDINATES, TIME, AND THE SKY

John Thorstensen

Department of Physics and Astronomy

Dartmouth College, Hanover, NH 03755